

Student Name _____

Teacher Name _____

School _____

System _____

MAAS



TENNESSEE

Tennessee Comprehensive Assessment Program Modified Academic Achievement Standards ~ Grade 5 Practice Test



PEARSON

Developed and published under contract with Tennessee State Department of Education by the Educational Measurement group of Pearson, a business of NCS Pearson Inc. 2510 North Dodge Street, Iowa City, Iowa 52245. Copyright © 2012 by Tennessee State Department of Education. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of Tennessee State Department of Education.

Table of Contents

Introduction	1
What is the TCAP Modified Academic Achievement Standards Test?	1
What are the questions testing?	1
Who is eligible to be tested?	1
How long will the tests take?	1
How will the tests be scored?	1
May calculators be used?	2
Which test accommodations may be used?	2
What is the purpose of the practice test?	2
Here are some tips for preparing students for the test	2
Reading/Language Arts	3
Mathematics	45
Science	79
Social Studies	119
Answer Key	151

Introduction

What is the TCAP Modified Academic Achievement Standards Test?

The TCAP Modified Academic Achievement Standards Test is a multiple-choice test designed to measure student achievement in certain skills in four content areas: Reading/Language Arts, Mathematics, Science, and Social Studies. The questions in this practice test are examples of items used in the actual test.

What are the questions testing?

Questions are written to test student performance in state content standards. The State Content Standards and Performance Indicators were developed by the Tennessee Department of Education. These Standards and Performance Indicators are listed on the State Department of Education Web site at <http://www.state.tn.us/education/curriculum.shtml>.

Who is eligible to be tested?

1. Students with a disability who are on an active IEP are eligible to take the MAAS.
2. Eligible students may have a disability in any of the Federal disability categories.
Note: The category Functionally Delayed is a State category, but a student cannot be excluded from participation in this assessment based on category of disability. A student whose disability is classified as Functionally Delayed is eligible to participate in this assessment if determined eligible by the IEP team, but the student will be considered a non-participant and his scores cannot be counted for AYP. **A student classified as Functionally Delayed taking the test would not count toward the 2% cap because he is considered a non-participant.**
3. It is the decision of the IEP team whether or not a student with a disability should be assessed with the MAAS.

How long will the tests take?

The length of the tests will vary, depending on the grade level. The time limits are generous and allow most students time to finish. Extended time limits only apply to students who are eligible for special or English Language Learner (ELL) accommodations.

How will the tests be scored?

The test answers will be machine scored. Results from the test provide information about how well students performed on the content being tested.

May calculators be used?

Calculators may be used on Part 1 and 2 of the mathematics portion of the TCAP Modified Academic Achievement Standards Test (grades 3–8) as per system policy.

Which test accommodations may be used?

The TCAP Modified Academic Achievement Standards Test may be administered using various procedures that are used during the student’s daily educational program. Certain conditions must be met for students to be eligible for special and ELL accommodations.

What is the purpose of the practice test?

In a classroom learning session, these questions can be used to prepare students for the actual test. Teachers can use the practice test to help familiarize students with the format of test questions and how the actual test will be administered. This practice test can also be used to inform parents of the type of test their children will be taking.

Here are some tips for preparing students for the test.

Remind students to:

Relax: It is normal to be somewhat anxious before the test. Remember that the score is only one of a number of measures of performance.

Listen: Listen to and read the test directions carefully.

Plan Use of Time: First, answer all the questions you are sure about. Do not spend too much time on any one question. If a question seems to take too long, skip it and return to it later if you have extra time.

Pause and Think: If you are not sure how to answer a question, carefully read it again. Rule out answer choices that you know are incorrect and then choose from those that remain.

Reading/Language Arts



Part 1

Directions Read the story. Then answer Numbers 1 through 7.

New Responsibilities



- 1 All the men groaned as they pulled the frame of the house upright to stand tall and proud against the evening sky. It was common for people of my Amish community to help our neighbors build their barns. Boys weren't really needed. I was still considered a boy. No matter how much I begged, the adults would let me hammer only a few wooden pegs into

Go On ►

place. Even my youngest brother, Liam, could hammer in pegs. I wanted to be old enough to really help!

2 I kicked at the dirt. My oldest brother, Caleb, wiped the sweat from his forehead with his bandana and tucked it into his pocket. He put a friendly arm over my shoulder that I shrugged off with a grunt.

3 “Abraham, you’ll be old enough soon. Next spring there will be plenty of barns to raise. There will be so much work that you’ll wish you could sneak out to go swimming instead!” Caleb chuckled.

4 I did not find his comment funny. I held up my arms so Caleb could inspect my muscles. “Tell me these arms aren’t strong enough to work,” I said. “I chop more wood with these arms than anyone else around. I can do the work, Caleb!”

5 Caleb looked at me with a smile. “I’ll talk to Poppa,” he said. “The Yoder’s barn will be built in a couple of weeks. Maybe you can help with it.”

6 My heart thumped in my chest like a heavy drumbeat. Caleb smiled and began walking toward the table that was set with a feast of food. “After weeks of working on this barn, I’m thinking of nothing but sausage and baked beans,” he said. “I promise to talk to Poppa, but only if you let me have your apple pie.”

7 We sat down at the long wooden tables. Glasses of cold lemonade were set out around the table. Everyone piled their plates high with meat, cheese, and biscuits. My plate remained empty. The only thing I could think about was raising the Yoder’s barn.

8 When the food was gone, Poppa and the other men began playing fiddles and banjos. Caleb clapped his hands as people began to dance. Tomorrow the men would finish the barn. They would make its wooden frame into a complete building. Tonight, though, there was a celebration.

9 I did not feel like celebrating. I walked to the barn and placed my hands carefully on the rough beams of the frame. There was nothing as pleasing to me as the smell of fresh wood. I walked around the soon-to-be barn and looked at the way the walls were put together. I wished that I could have helped. I heard footsteps behind me and turned to see my brother walking toward me.

10 “What did Poppa say?” I whispered hopefully.

11 Caleb paused, chewing on a blade of grass. Even in the low evening
light, I could see a big smile on his face. “Poppa says . . .”

12 Excited, I spoke quickly, “Tell me, Caleb!”

13 “What plans do you have two weeks from tomorrow?” Caleb asked.

14 I threw my hat in the air. I felt my hunger returning and wondered if
there was any apple pie left. After all, I was going to need all the strength I
could get!

1 Read the sentence from Paragraph 4.

I held up my arms so Caleb could inspect my muscles.

Which sentence shows another way to use the underlined word correctly?

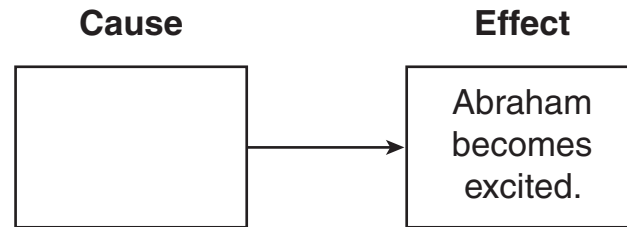
A The teacher will inspect going to the library.

B The boy will inspect his room to find his book.

C The cook will inspect the meal by making a good dessert.

Go On ►

2 Read the diagram.



Which sentence belongs in the empty box?

- F** The men are almost finished building the barn.
- G** Abraham is startled by the sound of pegs being hammered into wood.
- H** Abraham learns that he might be able to help build a barn.

3 What will most likely happen when Abraham helps with the barn?

- A** He will work on more than one project at a time.
- B** He will spend his time helping his youngest brother.
- C** He will do more than just hammer in pegs.

4 How can readers tell that this story is written from the first person point of view?

- F** The characters are real.
- G** The main character tells his feelings.
- H** The characters talk to each other.

5 Read the sentence from Paragraph 6.

My heart thumped in my chest like a heavy drumbeat.

This sentence shows an example of

- A** simile.
- B** hyperbole.
- C** personification.

6 How does Abraham show his excitement at the end of the passage?

- F** He makes plans to build the barn.
- G** He walks around the party area.
- H** He throws his hat in the air.

7 Why did the author most likely write “New Responsibilities”?

- A** to explain how to build a barn
- B** to get readers to work hard
- C** to tell a story about growing up

Go On ►

Directions Reyna wrote this rough draft of a report about mountain gorillas. It contains mistakes. Read the report and answer Numbers 8 through 14.

Gorilla Doctors

1 Many people work to take care of Earth. Trees, water, and wildlife all need our attention. Many animals need help, but the mountain gorilla needs help soon. Gorillas are brave and beautiful animals from Africa. There are many interesting animals that live in Africa.

2 Unfortunately, there are not many mountain gorillas left. In fact, most Africans have never seen one. The gorillas' forest habitat is being cut down to make room for farms. This means that farmers and gorillas are living closer together.

3 Another problem is that gorillas can catch human diseases. Some illnesses are more serious than a cold, and then gorillas need help from humans. They can catch colds from farmers the same way a person can catch a cold.

4 Luckily, groups of people are working to save mountain gorillas. Scientists and veterinarians work together to keep gorillas healthy.

5 People must continue to work together to care for our planet. Because there are so many people and programs willing to help, the number of mountain gorillas may be increasing.

8 Which title would best replace the title "Gorilla Doctors"?

- F** Diseases that Affect Gorillas
- G** Caring for Mountain Gorillas
- H** Places Where Gorillas Live

9 Read Paragraph 1.

(1) Many people work to take care of Earth. (2) Trees, water, and wildlife all need our attention. (3) Many animals need help, but the mountain gorilla needs help soon. (4) Gorillas are brave and beautiful animals from Africa. (5) There are many interesting animals that live in Africa.

Which sentence does not belong in the paragraph?

- A** 1
- B** 3
- C** 5

10 Reyna wrote this list of topics before writing the report.

Gorillas
1. Loss of habitat
2. Human diseases
3. _____

Based on the report, which topic should be included on the list?

- F** African animals
- G** Care for the planet
- H** Help from scientists

Go On ►

11 Read Paragraph 3.

(1) Another problem is that gorillas can catch human diseases.
(2) Some illnesses are more serious than a cold, and then gorillas need help from humans. (3) They can catch colds from farmers the same way a person can catch a cold.

Choose the correct order of these sentences.

A 2, 3, 1

B 1, 3, 2

C 3, 2, 1

12 People interested in reading this report most likely want to learn about

F animals that have human diseases.

G animals that need to be protected.

H different animals from around the world.

13 Reyna needs to find information about diseases gorillas catch from humans. Which is the most reliable source for Reyna to use?

- A** a scientific magazine about gorillas
- B** a journal entry by a person who has seen gorillas
- C** a report about gorillas written by a student in class

14 The author most likely wrote this report to

- F** entertain readers with a story about mountain gorillas.
- G** describe where mountain gorillas live.
- H** explain why mountain gorillas need help.

Go On ►

Directions Read the poem. Then answer Numbers 15 through 18.

Rainy Days

Let the summer slip away
Let dark days start to fall
Let the blue give way to gray
I long to hear the call.

- 5 It sounds just like a tune to me
It waters me with song
It always is good company
At night or all day long.

- Rain wears shoes that go pitter-pat
10 Rain dips and dives and dances
Rain drips and drives, this way and that
Upon the roof it prances.

On metal roofs it rat-a-tats

- On wooden roofs it drums
15 On windows it just splitter-splats
When at last it comes.

- Down on leaves it splashes
Down wooden trunks it pours
Down to the earth it dashes
20 Calling me outdoors.



© Magdalena Duczowska/Stockphoto #4783576

15 The reader can tell that “Rainy Days” is a poem because it has

- A** words that rhyme.
- B** one character.
- C** a problem to solve.

16 Choose the line that best describes the time of year when the poem takes place.

- F** Let the summer slip away
- G** Rain wears shoes that go pitter-pat
- H** On metal roofs it rat-a-tats

17 Read Line 10 from the poem.

Rain dips and dives and dances

This line contains an example of

- A** hyperbole.
- B** personification.
- C** metaphor.

18 Which line from the poem contains an example of onomatopoeia?

- F** Let dark days start to fall
- G** On windows it just splitter-splats
- H** Down wooden trunks it pours

Go On ►

Directions

Carla gave this speech. Read the speech and answer Numbers 19 through 24.

Let Our Talents Show

1 Have you heard that someone in our school can juggle? Did you know that a girl in my math class can sing and play the piano with her eyes covered? Did you hear about the boy who can balance a basketball on his head? These are amazing talents, but many students don't know they could be sitting next to someone in class who can do these things.

2 I am speaking to you today for all of the fifth grade students. We think we should have a fifth grade talent show. We believe that putting together this show would prove to you, our teachers, that we are hard workers. It is also a good way for us to learn about each other and have fun!

3 I think kids sometimes feel that they don't have many things in common with other kids at school. A talent show will give us a chance to get to know each other. Last week, I talked to a group of students and asked if they would like to have a talent show. Two of the girls discovered they both love to sing. It will be great to see new friendships form as students learn they enjoy the same things.

4 We know putting together a talent show is hard work. However, this is important to all fifth graders. Some students are willing to make decorations for the stage. Other students want to make posters for the



talent show. We are all ready to do this project.

- 5 I hope that you, the fifth grade teachers, understand how important this talent show is to us. It would be a great way for the fifth graders to work together and learn about each other. We hope you will consider our wonderful idea.

19 Carla begins the speech with a question in order to

- A** ask for volunteers for the talent show.
- B** find out if the audience has talent.
- C** get the audience interested in her topic.

20 Read the sentence from Paragraph 2.

It is also a good way for us to learn about each other and have fun!

Choose the homonym for the underlined word.

- F** path
- G** weigh
- H** say

21 Carla will do a good job giving her speech if she

- A** stays on topic and is polite to the audience.
- B** uses big words and speaks softly.
- C** uses the names of the audience members.

Go On ►

22 The audience for this speech is the

- F** principal.
- G** elementary school students.
- H** fifth grade teachers.

23 Read the sentence from Paragraph 3.

I think kids sometimes feel that they don't have many things in common with other kids at school.

What does the underlined word mean?

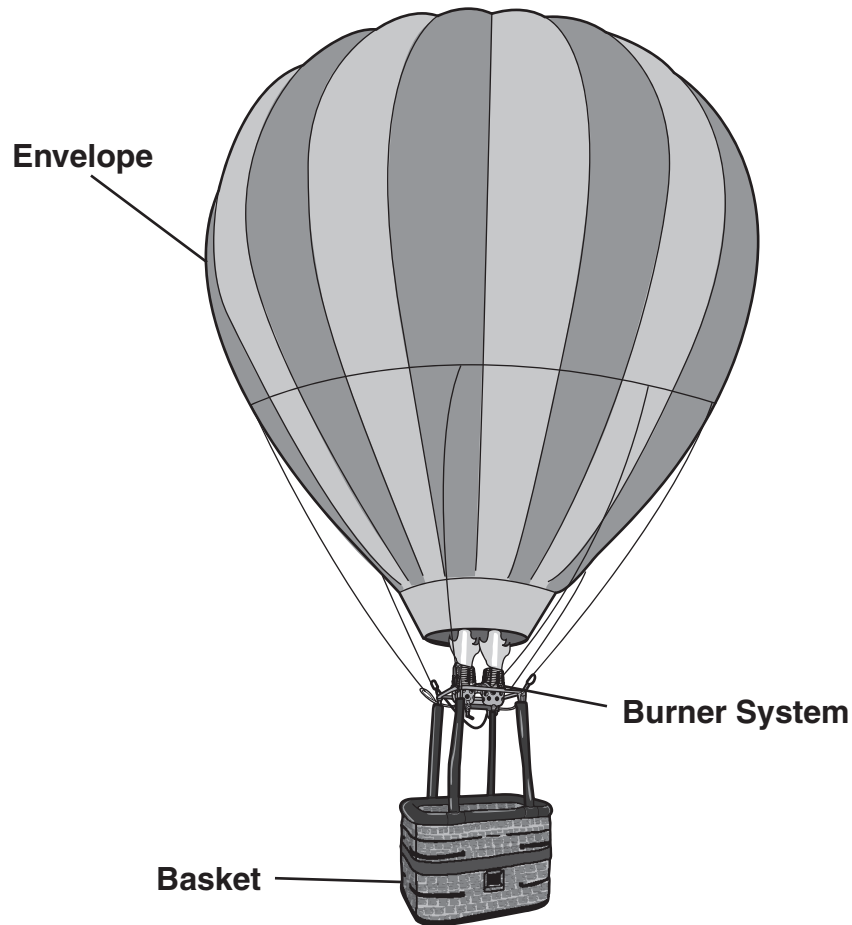
- A** alike
- B** new
- C** special

24 Which sentence is the best summary of the speech?

- F** The fifth grade students think that a talent show would be a good way to learn about each other and share interests. It will be hard work, but there are many students willing to help.
- G** The fifth grade students have many talents. Some of them can juggle and balance basketballs, while others can play the piano with their eyes covered.
- H** The fifth grade students are talented singers and artists. There are many other things they can do as well. Some students want to help with making decorations for the stage, while other students want to make posters.

Directions Read the passage. Then answer Numbers 25 through 29.

Riding the Wind



What's it like to fly in a hot-air balloon?

- 1 Imagine sailing through the sky, high above buildings and trees, in perfect peace and quiet. No noisy engines. No smudgy window in your way. No wind blowing in your face. You can't feel or hear the wind because you're traveling in the exact same direction and at the exact same speed it is.
- 2 A hot-air balloon has three main parts: the balloon, called an envelope; a basket, where passengers ride; and a burner system, which supplies the hot air.

Go On ►

- 3 Balloon envelopes vary in size and shape, but they have to be really, really big to lift even a single person. Most weigh more than an adult man and use more fabric than you would need to cover a baseball diamond.
- 4 The basket is usually made of wicker, which is sturdy but not too stiff. It needs to bend a bit for a soft landing, just like a good jumper bends her legs instead of keeping them stiff and straight when she lands.
- 5 When the burner system blasts flames, it makes a noisy whooshing sound, but once the balloon is flying, the burner can be turned off. The air in the envelope will then cool, and the balloon will slowly sink unless the pilot starts the burner again.
- 6 To steer, a pilot adds hot air to go up or lets it out to go down, until he finds a breeze blowing in the direction he wants to fly. But no matter which way the wind blows them, balloonists have an amazing bird's-eye view of the world.

"Riding the Wind" from *CLICK* magazine, March 2007, Vol. 10, No. 3, text copyright © 2007 by Carus Publishing Company. Used by permission of Cricket Magazine Group, Carus Publishing Company.

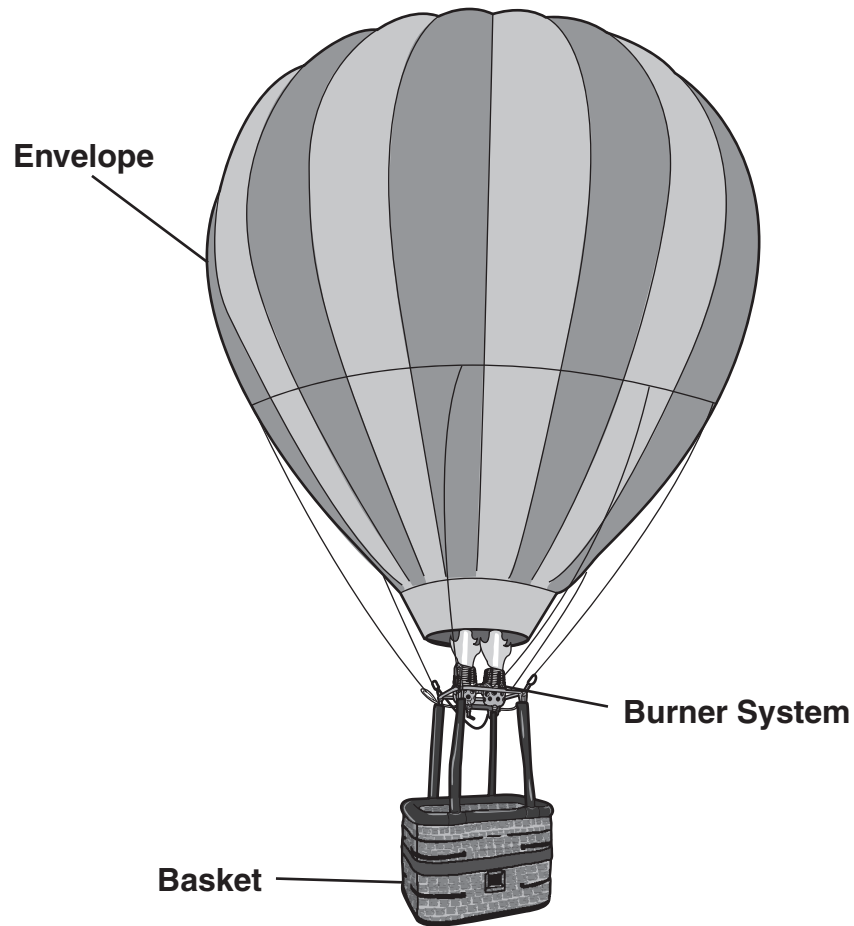
25 Read this sentence from Paragraph 6.

To steer, a pilot adds hot air to go up or lets it out to go down, until he finds a breeze blowing in the direction he wants to fly.

What is a synonym for the underlined word above?

- A** cause
- B** improve
- C** guide

26 Look at the picture.



This picture helps the reader to

- F** learn the parts of a hot-air balloon.
- G** see how far a hot-air balloon can travel.
- H** know how many people fit in a hot-air balloon.

Go On ►

27 Jeremy is writing a report on hot-air balloons. Which source would have the best information for his report?

- A** a story titled “Hot-air Balloon Adventures”
- B** an Internet site titled “Hot-air Balloon Facts”
- C** a newspaper article titled “A Day in a Hot-air Balloon”

28 Read Paragraph 5.

When the burner system blasts flames, it makes a noisy whooshing sound, but once the balloon is flying, the burner can be turned off. The air in the envelope will then cool, and the balloon will slowly sink unless the pilot starts the burner again.

What happens after the burner is turned off?

- F** The balloon basket bends.
- G** The wind pushes the balloon up.
- H** The balloon gradually sinks.

29 Which sentence best describes the main idea of the passage?

- A** A burner uses a flame to heat the air in the balloon.
- B** A balloon envelope is made from a large amount of fabric.
- C** A hot-air balloon has several parts that work together to make it float.

Directions Read and answer Numbers 30 through 33.

30 Read the sentence.

We told the bus driver that the backpacks left on the bus were mine.

Which word best replaces the underlined word in the sentence above?

- F** ours
- G** those
- H** they

31 Which is a complete sentence?

- A** The old, broken television.
- B** The old television needed repair.
- C** The old television loudly.

Go On ►

32 Which sentence is written correctly?

F “Jenny asked,” “Will you help me with my homework?”

G Jenny asked, “Will you help me with my homework?”

H Jenny asked, Will you help me with my homework?”

33 Which sentence is written correctly?

A The tiny children be very sleepy.

B The tiny children are very sleepy.

C The tiny children was very sleepy.

STOP 

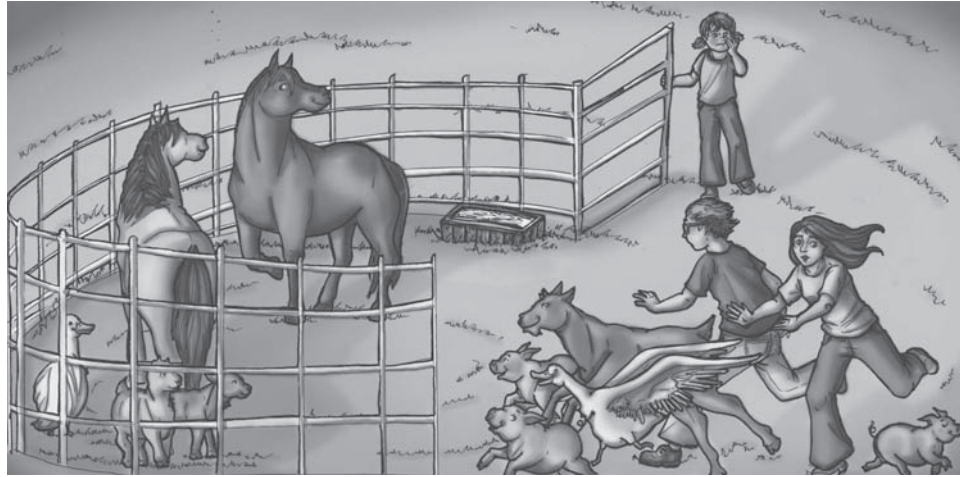
**DO NOT
MARK
ON THIS
PAGE**

Directions Read the passage. Then answer Numbers 34 through 41.

Helping at the Petting Zoo

- 1 “I’m so glad that I got to spend time with you over the summer,” Tonya said to her grandmother on the telephone. “I really liked helping with the farm animals. I learned a lot.”
- 2 “It was great having you here,” Grandma replied. Then Tonya’s grandmother spoke the most amazing words. “Grandpa and I want you to help us take care of the animals at the petting zoo during the county fair.”
- 3 Tonya had been hoping to hear these words. She was smiling from ear to ear. For years, Tonya had been watching her older cousin, Chris, help their grandparents at the petting zoo. Tonya always wanted to help but had been too young.
- 4 “I would love to help!” Tonya exclaimed. “You name it, and I’ll do it!”
- 5 When Tonya hung up the telephone, she made a big note on her calendar. In the box marked “Saturday,” she wrote the words “Work at the Petting Zoo!” The important day was three weeks away.
- 6 That night, Tonya stayed awake in bed. She thought about the petting zoo disaster that had happened two years ago. She was still embarrassed. On the last day of the fair, Tonya had tried to help do some of the jobs without telling anyone. She had followed Chris into the animal pen to help give water to some of the animals. Tonya accidentally spilled the entire bucket of water and created a huge muddy mess. Then when Chris left the pen to get some animal food, Tonya had followed him. Tonya forgot to close the gate. Pigs, ducks, and goats got out and wandered around the fairground.
- 7 There was confusion as farm animals ran around. Tonya’s heart had beat so fast that she thought it might burst through her chest. Many of the

adults and children at the fair had helped put the animals back into the pen. Of course, everyone thought the event was funny. After the animals were returned to the pen, Tonya had walked away more embarrassed than ever. She knew then that she was not ready to be a helper.



8 Now, two years had passed, and Tonya had spent a lot of time learning about the animals on her grandparents' farm.

9 Finally, the big day arrived. Tonya began the day by spreading hay around the pens. Then Grandpa led animals from the trailer to their pens. The fair began soon after everything was set up. Children gathered around the petting zoo waiting to pet the animals.

10 Tonya's friends arrived in time to see her feed a baby lamb with a bottle. Then Tonya walked a cow around a pen. When some of the hens got excited, she helped calm them. She felt great until she saw her cousin Chris enter the pen. "What is he doing here?" Tonya thought to herself.

11 "Do you need help?" Chris asked.

12 "No, thanks," Tonya answered quickly.

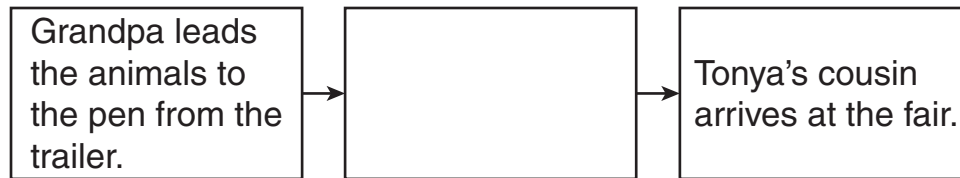
13 "That's great!" Chris said with a look of relief. "I really want to walk around and play some games!"

14 Tonya felt good knowing that Chris also trusted her. Now she knew she could be the official helper. "Go have fun," she said to Chris. "I've got everything under control."

Go On ►

15

Grandpa and Grandma smiled as they watched Tonya from the other side of the pen. Tonya helped a little girl pet a large pig, and she brought animal food to the kids so that they could feed the goats. Her grandparents could see her love for the animals, and her responsibility showed. Helping at the petting zoo was even more fun than Tonya had imagined it would be.

34 Read the diagram.

Which event belongs in the empty box?

- F** Children gather around the petting zoo.
- G** Tonya spreads hay around the animal pen.
- H** Chris asks Tonya if she needs help.

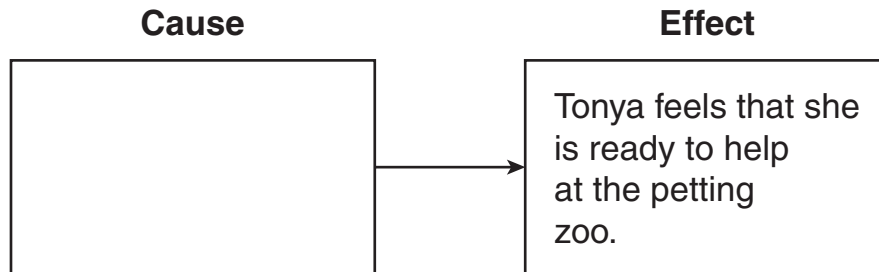
35 How can the reader tell that “Helping at the Petting Zoo” is fiction?

- A** The author tells about himself.
- B** There are rhyming words.
- C** Characters talk to each other.

36 What is Tonya's problem in the passage?

- F** She is worried about taking care of the animals.
- G** There are too many animals in the pen.
- H** It is difficult for her to wait until the day of the event.

37 Look at the diagram.



Which event belongs in the empty box?

- A** Tonya brings water to the animals.
- B** Tonya is able to keep the hens calm when they get excited.
- C** Tonya learns how to take better care of the animals over the summer.

38 Where is Tonya when she remembers the petting zoo disaster?

- F** the fairgrounds
- G** her bedroom
- H** an animal pen

Go On ►

39 Read the analogy.

Break is to fix as ask is to _____.

Which word best completes the analogy?

- A** laugh
- B** shout
- C** reply

40 How does the petting zoo disaster change Tonya's thoughts about working with the animals?

- F** It shows her that she needs to find a job other than working with animals.
- G** It helps her realize she needs to spend more time learning how to care for the animals.
- H** It makes her decide not to work with animals again.

41 What is the author's purpose for writing this passage?

- A** to provide information about jobs at a county fair
- B** to entertain readers by telling about a girl who learns to do a job well
- C** to describe how exciting it is for a girl to feed farm animals

Directions

A student wrote this book report. It contains mistakes.
Read the report and answer Numbers 42 through 48.

A Trip of Hope Book Report

(1) *A Trip of Hope*, written by Ann York, is a great book and has become one of my favorites. (2) It is a story about the pilgrims who traveled to America on the *Mayflower*. (3) The main character is an 11-year-old boy named James who is traveling on the ship with his parents.

(4) James wants to make many friends while on the ship.
(5) Unfortunately, some of the other children on the ship tease them.
(6) One day, a terribly storm tosses the ship around the Atlantic Ocean.
(7) During the storm James sees a man fall off the ship and tells the crew.
(8) The crew members able to save the man because of James's quick action. (9) It is not long before the other children on the ship realize that they shouldn't never tease James.

(10) Ann York's books always have characters that seem so real.
(11) She writes about exciting adventures they are interesting.
(12) I would definitely tell all fifth graders to read *A Trip of Hope*.

42 Read Sentence 2.

It is a story about the pilgrims who traveled to America on the *Mayflower*.

What is another correct way to rewrite the underlined words?

F Its'

G It's

H Its

Go On ►

43 Read Sentence 5.

Unfortunately, some of the other children on the ship tease them.

Which word best replaces the underlined word?

- A** him
- B** us
- C** we

44 Read Sentence 6.

One day, a terribly storm tosses the ship around the Atlantic Ocean.

Which is the correct way to write the underlined word in the sentence?

- F** most terrible
- G** terriblist
- H** terrible

45 Read Sentence 7.

During the storm James sees a man fall off the ship and tells the crew.

Where should the comma be placed in the sentence?

- A** During the storm James sees a man, fall off the ship and tells the crew.
- B** During the storm, James sees a man fall off the ship and tells the crew.
- C** During the storm James sees a man fall off the ship and, tells the crew.

46 Read Sentence 8.

The crew members able to save the man because of James's quick action.

What is the correct way to revise the sentence?

- F** The crew members are able to save the man because of James's quick action.
- G** The crew members is able to save the man because of James's quick action.
- H** The crew members being able to save the man because of James's quick action.

Go On ►

47 Read Sentence 9.

It is not long before the other children on the ship realize that they shouldn't never tease James.

What is the correct way to write the underlined words?

- A** should not never
- B** should not
- C** should never not

48 Read Sentence 11.

She writes about exciting adventures they are interesting.

Which is the best way to correct the run-on sentence?

- F** She writes about exciting adventures and are interesting.
- G** She writes about adventures, but they are exciting and interesting.
- H** She writes about exciting and interesting adventures.

Directions Read the passage. Then answer Numbers 49 through 54.

The Secrets of the Humpback Whale

1 You stare across the ocean waters. Suddenly, you see something rise to the surface. You realize that a humpback whale seems to be looking right at you!

2 The curious animal wants to get a better look at the world above the ocean. Scientists call this action “spy hopping.”

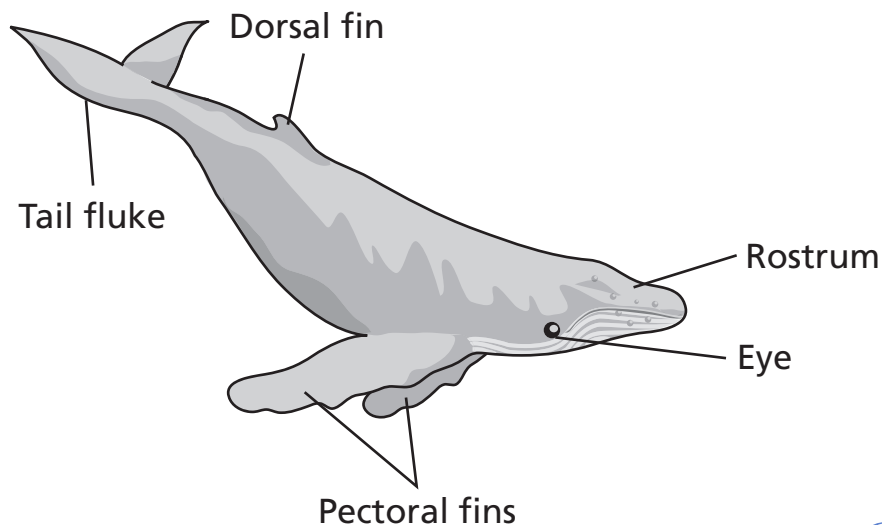


© Sue Flood/The Image Bank/Getty Images #200513081-001

The Body

3 The large body of a humpback whale is black across the top, but it has a mix of black and white on its belly. It also has bumps on its head that grow at least one stiff hair. Some scientists think that these hairs might help the whales detect movement in the waters around them.

4 Adult humpback whales can grow to be 40 – 50 feet long. That’s longer than a school bus! They can weigh up to 40 tons, which means they could weigh more than two school buses.



Go On ►

A Close Bond

- 5 Young whales are born in warm, tropical waters. Like many other baby animals, the calves like to play. For example, when a mother whale is floating on the surface of the water, the calf will wiggle up her mother's back and then slide down the other side!
- 6 A mother whale will often touch her calf with her fins. She also likes to give her calf a ride on the top part of her head. The close bond between the mother and calf makes the calf feel safe. When a calf gets into trouble, it can send out an alarm call, knowing its mother will quickly answer.

Time to Eat

- 7 The humpback whale can eat 2,000 pounds of food in one day! It often eats small fish and tiny shrimp-like animals called krill. Its big appetite helps the humpback grow a thick layer of blubber beneath its skin. This fatty layer can be four inches thick, and it helps the whale survive its long migration.

The Long Migration

- 8 Like some types of birds, humpback whales migrate to warmer climates during the winter months. During the summer months, they prefer to live in the cooler water closer to the north and the south poles. As winter approaches and the water becomes too cold for them, the whales swim to warmer waters closer to the equator.
- 9 Humpback whales travel longer distances than any other mammal. Some groups of whales travel up to 5,000 miles!



Songs of the Sea

- 10 Humpback whales are great singers too. Their songs include grunts, clicks, moans, and buzzes. Some songs can be 20 minutes long and can be as loud as a jet airplane!
- 11 Scientists think that there may be different reasons for the whales' music. Usually, male whales sing most often during mating season. They could be telling others to stay away from their territory. Whales also sing when they are traveling. The songs may be a way for them to stay in touch with each other. In addition, all the whales in a certain area learn the same song.

Keeping up the Studies

- 12 Today, scientists continue to study the humpback whale. Perhaps scientists will someday learn all the secrets of the humpback whale.

49 Look at the photo.



This photo best helps the reader to

- A** know what humpback whales look like.
- B** identify a mother humpback whale.
- C** see the direction whales travel during migration.

Go On ►

50 After reading the passage, the reader can tell that humpback whales

- F** have trouble finding food during the day.
- G** are fast swimmers.
- H** are smart animals.

51 The headings in this passage help readers to

- A** understand unknown words.
- B** find information quickly.
- C** memorize important facts.

52 Which graphic would most help the reader understand humpback-whale migration?

- F** a picture of a humpback whale that is migrating
- G** a list of places where humpback whales travel during migration
- H** a map of the migration paths that humpback whales take

53 Which question can a student answer after reading this passage?

- A** When do calves stop playing with their mothers?
- B** What will scientists learn about whales in the future?
- C** How far can some humpback whales travel?

54 Select the best summary of the passage.

- F** Humpback whales eat large amounts of food, travel long distances, and sing songs. While much is known about these whales, there is still much more to discover.
- G** Humpback whales can be the size of a school bus. They travel to the north and south poles during migration.
- H** Humpback whales sometimes come above the surface of the ocean to “spy hop.” Scientists believe they do this so that they can see what is happening above the surface of the water.

Go On ►

Directions Martin is writing an essay about how his family and their neighbor help each other. Read the paragraph. Then answer Numbers 55 through 58.

My family helps my neighbor, and she helps us. Before school, Mrs. Nelson watches my sister and me until it is time for us to get on the bus. Every afternoon, I take Mrs. Nelson's dog for a walk, and my sister plays with him. _____, Dad mows her lawn.

55 Read the sentence from the paragraph.

_____, Dad mows her lawn.

Which transition would best begin this sentence?

- A** Instead
- B** However
- C** Sometimes

56 Which sentence best supports the topic sentence in the paragraph?

- F** Mrs. Nelson has become a good friend to our family.
- G** Every morning, Mom drops us off at Mrs. Nelson's house.
- H** Mrs. Nelson enjoys gardening.

57 Which sentence best fits the context of ideas in the paragraph?

- A** Mrs. Nelson has lived in her house for many years.
- B** Mrs. Nelson often bakes cookies for us.
- C** Mrs. Nelson enjoys taking the bus around town.

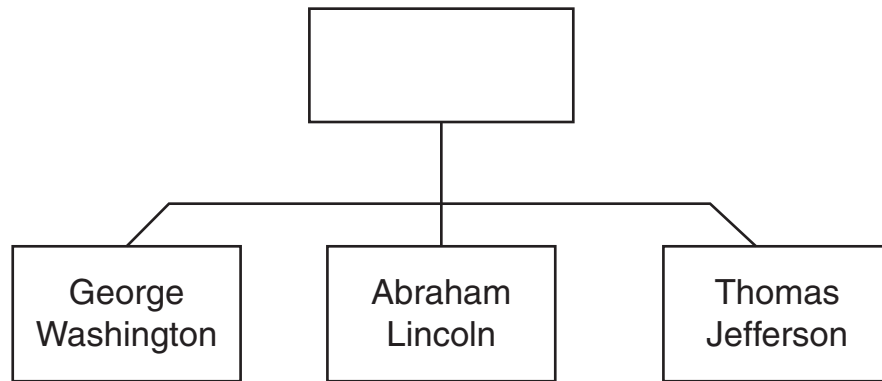
58 What is the best concluding sentence for this paragraph?

- F** I am glad Mrs. Nelson is my neighbor.
- G** I enjoy playing with Mrs. Nelson's dog.
- H** I like it when Mrs. Nelson tells us stories.

Go On ►

Directions Read and answer Numbers 59 through 66.

59 A student completed this web as a prewriting exercise.



Which best completes the web?

- A** Famous Musicians
- B** Famous Presidents
- C** Famous Authors

60 Choose the main purpose of a film titled *Bicycle Safety and You*.

- F** to entertain
- G** to persuade
- H** to inform

- 61** In a report about Mark Twain, under which heading could a reader find information about the books Mark Twain wrote?
- A** Growing Up
 - B** Success as a Writer
 - C** Life as a Reporter

- 62** Look at the picture.



What is the mood of the picture?

- F** confused
- G** serious
- H** joyful

Go On ►

63 Read the sentences.

Jenna was so excited about the fishing contest. She hardly slept all night.

Choose the best way to combine the sentences.

- A** Jenna was so excited about the fishing contest; however, she hardly slept all night.
- B** Even though Jenna was excited about the fishing contest, and she hardly slept all night.
- C** Because Jenna was so excited about the fishing contest, she hardly slept all night.

64 Choose the best resource for writing a report about battery-powered automobiles.

- F** an Internet Web site titled “New Types of Automobiles”
- G** a book titled “The Inventor of the Automobile”
- H** a CD-ROM titled “Automobiles of the Past”

65 Read the sentences.

Some people are afraid to learn how to ride a bike. _____, if they just get on and try, they may be surprised at how easy it can be.

Which transition word should be added to the blank line?

- A** Then
- B** However
- C** Since

66 Look at the picture below.



What is the main idea of the picture?

- F** Two girls are talking about a basketball game.
- G** Two girls are playing a basketball game.
- H** Two girls are winning a basketball game.

STOP 

**DO NOT
MARK
ON THIS
PAGE**

Mathematics



Part 1

- 1** How is 5,501,000 written in words?
- A** five million, five hundred one
 - B** five million, five hundred one thousand
 - C** five million, five hundred thousand, one

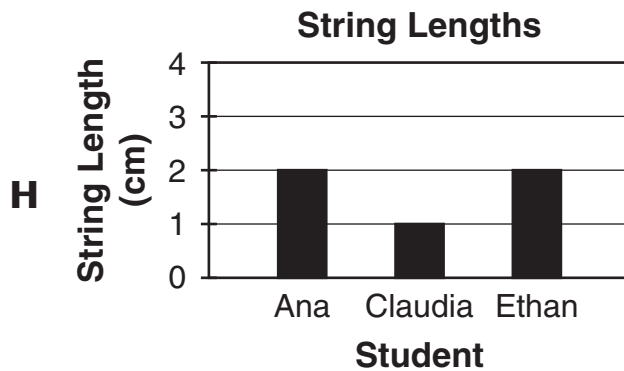
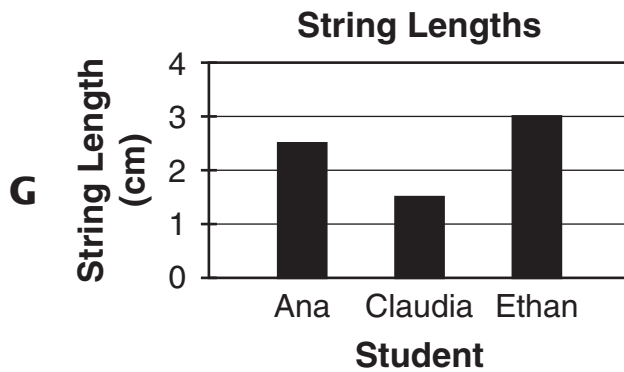
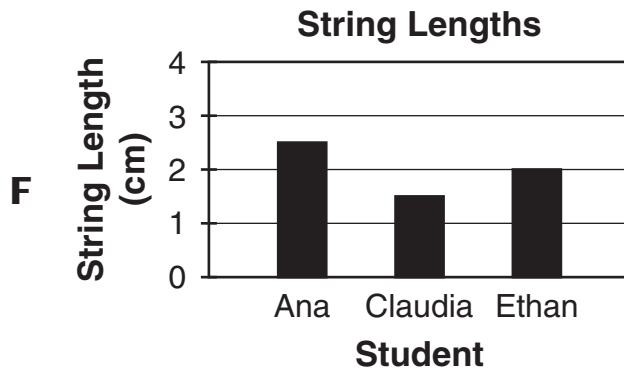
Go On ►

- 2 The table shows the lengths of string used by 3 different students during an experiment.

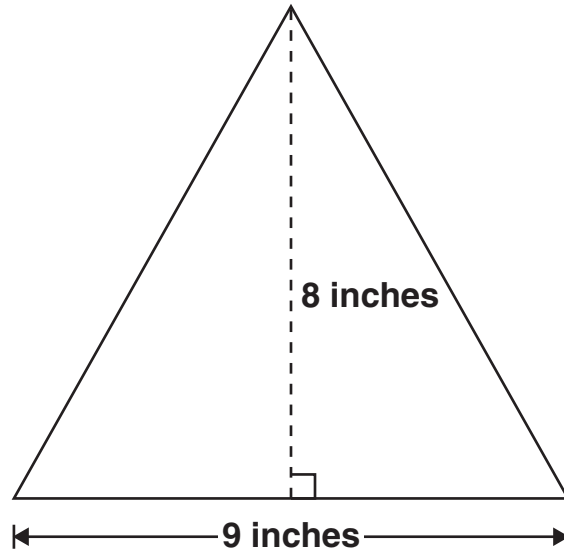
String Lengths

Student	String Length (cm)
Ana	2.5
Claudia	1.5
Ethan	2.0

Which graph best represents the data in this table?



- 3** A sign has the dimensions shown below.



$$\text{Area} = \frac{1}{2} \text{ base} \times \text{height}$$

What is the area of the sign?

- A** 72 square inches
- B** 36 square inches
- C** 17 square inches

Go On ►

4 A student has one sheet of stickers.

- There are 78 stickers on the sheet.
- There are 6 rows of stickers on the sheet.
- There are an equal number of stickers in each row on the sheet.

How many stickers are in each row?

F 11

G 12

H 13

5 Which number is equivalent to eight hundred sixty-four thousandths?

A 0.0864

B 0.864

C 864,000

6 Solve:

$$28\frac{3}{10} - 19.2 =$$

F $9\frac{1}{10}$

G $9\frac{1}{4}$

H $9\frac{1}{2}$

7 What is the value of the expression when $w = 10$?

$$w \times \left(7\frac{3}{5} + 1\frac{2}{5}\right) - \frac{2}{5}$$

A $79\frac{3}{5}$

B $85\frac{3}{5}$

C $89\frac{3}{5}$

Go On ►

8 What is 2.25 written as a mixed number?

F $2\frac{1}{25}$

G $2\frac{1}{4}$

H $2\frac{2}{5}$

9 Look at the inequality below.

$$4x > 20$$

Which set contains only values of x that make this inequality true?

A $\{3, 4, 5\}$

B $\{5, 6, 7\}$

C $\{6, 8, 10\}$

- 10** The list below shows the kinds of paint a painter used to make a sign.

- 3 gallons of red paint
- 2 gallons of white paint
- 3 cups of clear paint

Which information is not needed to find how many more gallons of red paint she used than white paint?

- F** the number of cups of clear paint she used
G the number of gallons of red paint she used
H the number of gallons of white paint she used

- 11** Which number sentence is true?

A $\frac{2}{6} > \frac{3}{12}$

B $\frac{2}{6} = \frac{3}{12}$

C $\frac{2}{6} < \frac{3}{12}$

Go On ►

- 12** The amount of salt and pepper Juan needs for a recipe is shown below.

- Juan needs $2\frac{6}{8}$ teaspoons of salt.
- Juan needs $1\frac{3}{8}$ teaspoons of pepper.

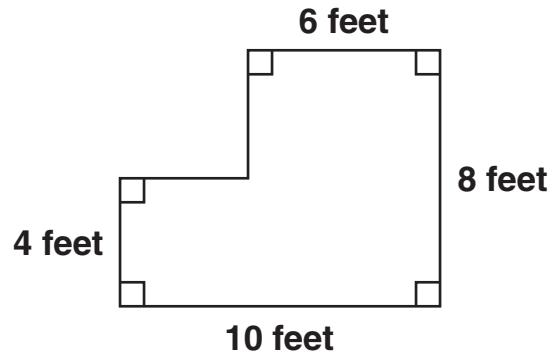
Which is the best estimate of the combined amount of salt and pepper Juan needs for this recipe?

- F** $\frac{1}{2}$ teaspoon
- G** 1 teaspoon
- H** $4\frac{1}{2}$ teaspoons

- 13** Andy made 78 ounces of lemonade. He put the lemonade in 12-ounce cups. What is the greatest number of 12-ounce cups Andy can fill completely with the lemonade he made?

- A** 6
- B** 7
- C** 8

- 14** What is the perimeter of the figure below?



Perimeter = distance around a figure

- F** 28 feet
- G** 32 feet
- H** 36 feet

- 15** What value of x makes this equation true?

$$x + 1\frac{1}{2} = 5$$

- A** $3\frac{1}{2}$
- B** $4\frac{1}{2}$
- C** $6\frac{1}{2}$

Go On ►

16 Which decimal is equivalent to $\frac{6}{10}$?

F 0.06

G 0.35

H 0.60

17 What is the value of the expression below?

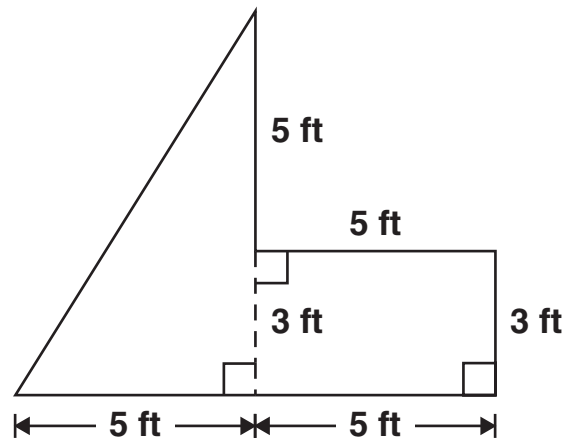
$$\frac{5}{6} - \left(\frac{3}{12} + \frac{1}{12} \right)$$

A $\frac{1}{3}$

B $\frac{1}{2}$

C $\frac{2}{3}$

- 18** The diagram below shows the dimensions of the patio in Mrs. Delgado's backyard.



Area of Rectangle = length \times width

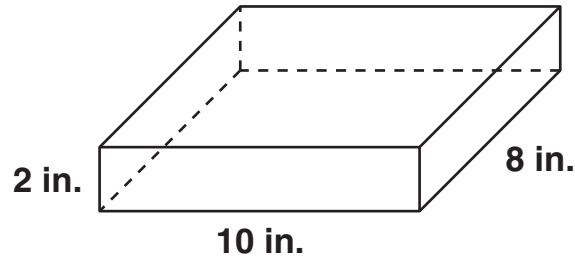
$$\text{Area of Triangle} = \frac{1}{2} \text{ base} \times \text{height}$$

What is the area of the patio?

- F** 20 square feet
G 35 square feet
H 55 square feet

Go On ►

- 19** The dimensions of a rectangular prism are shown below.



$$\text{Volume} = \text{length} \times \text{width} \times \text{height}$$

What is the volume of this rectangular prism in cubic inches?

- A** 20 cubic inches
- B** 26 cubic inches
- C** 160 cubic inches
- 20** Mr. Smith bought a package of 80 erasers. He put an equal number of erasers in each of 22 bags. Which statement best describes the greatest number of erasers Mr. Smith could have put in each bag?
- F** Each bag had 3 erasers, and 4 erasers were left over.
- G** Each bag had 3 erasers, and 14 erasers were left over.
- H** Each bag had 3 erasers, and 16 erasers were left over.

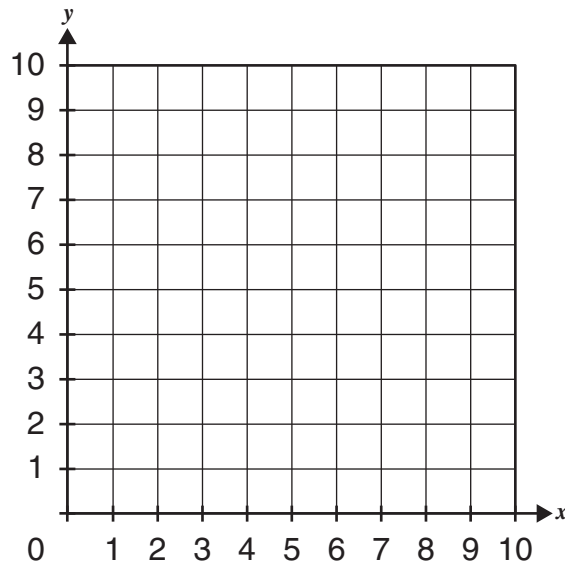
21 Which number sentence is true?

A $\frac{7}{8} > 0.75$

B $\frac{7}{8} = 0.75$

C $\frac{7}{8} < 0.75$

22 Jasmine drew a vertical line segment that was 8 units long on a grid like the one shown below.



Which list of coordinate pairs could represent the locations of the endpoints of the line segment Jasmine drew?

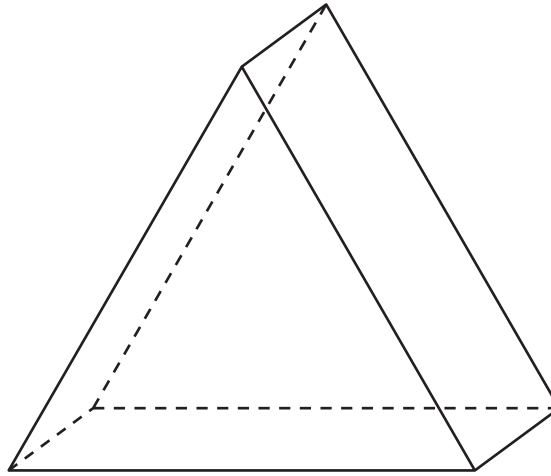
F (4, 9) and (4, 1)

G (8, 0) and (8, 7)

H (8, 4) and (1, 4)

Go On ►

- 23** A three-dimensional figure is shown below.



- Each triangular face has an area of 10 square centimeters.
- Each rectangular face has an area of 12 square centimeters.

What is the surface area of this figure?

- A** 22 square centimeters
- B** 36 square centimeters
- C** 56 square centimeters

- 24** What is the value of q in the equation below?

$$5 = q - 3\frac{1}{8}$$

F $8\frac{1}{8}$

G $2\frac{1}{8}$

H $1\frac{7}{8}$

- 25** The distances Leonor jumped in 5 jumps are listed below. All the distances are in inches.

65, 53, 62, 53, 58

What is the mode of these distances?

- A** 53 inches
- B** 58 inches
- C** 62 inches

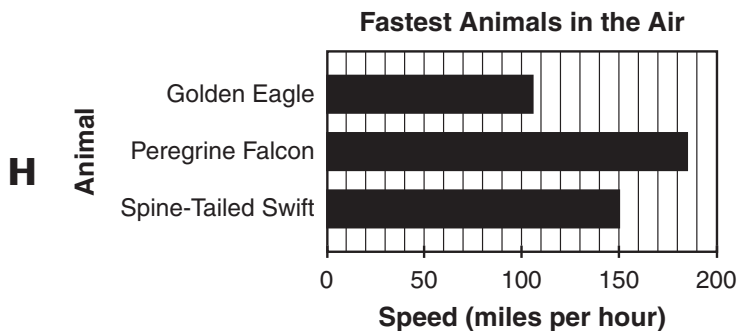
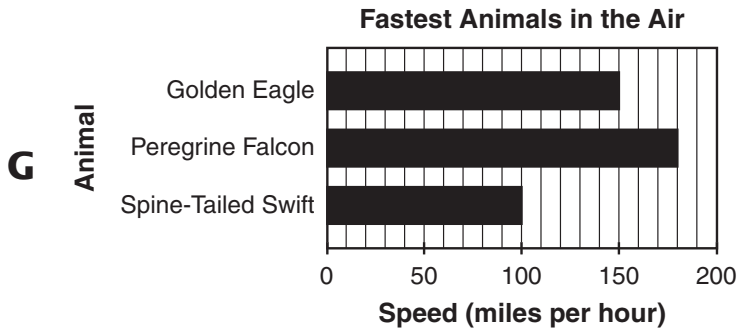
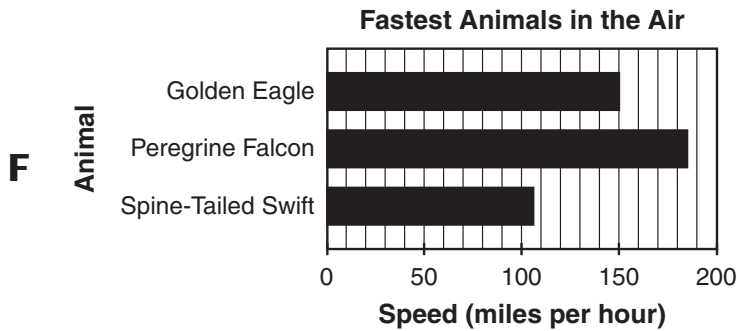
Go On ►

- 26** The table below shows the speed, in miles per hour, of some of the fastest animals in the air.

Fastest Animals in the Air

Animal	Speed (miles per hour)
Golden Eagle	150
Peregrine Falcon	185
Spine-Tailed Swift	106

Which graph best represents the data in the table?



STOP 

**DO NOT
MARK
ON THIS
PAGE**

Part 2

- 27** Conner put the same number of carrot sticks into each lunch he made.

- He had 49 carrot sticks.
- He made 6 lunches.
- He put the greatest number of carrot sticks he could in these lunches.

How many carrot sticks did Conner put in each lunch?

- A** 7
B 8
C 9

- 28** Richard made a poster in the shape of a parallelogram, with the dimensions shown below.



$$\text{Area} = \text{base} \times \text{height}$$

What is the area of this poster?

- F** 28 square feet
G 20 square feet
H 12 square feet

29 Solve:

$$\frac{4}{5} + 0.625 =$$

- A** 1.425
- B** 1.075
- C** 0.825

30 Solve:

$$12\frac{1}{4} - 8\frac{1}{2} =$$

- F** $3\frac{1}{4}$
- G** $3\frac{3}{4}$
- H** $4\frac{1}{4}$

Go On ►

- 31** Bianca cut 92 inches of string into 12-inch pieces. Which statement best explains how Bianca cut the string?
- A** She cut the string into 7 pieces of equal length and had 2 inches left over.
 - B** She cut the string into 7 pieces of equal length and had 8 inches left over.
 - C** She cut the string into 8 pieces of equal length and had 0 inches left over.

- 32** What is the value of this expression?

$$4 - \left(\frac{4}{6} + \frac{1}{6} \right)$$

- F** $3\frac{1}{6}$
- G** $3\frac{1}{3}$
- H** $3\frac{1}{2}$

- 33** Which number is equivalent to forty-nine thousandths?
- A** 0.0049
 - B** 0.049
 - C** 0.49

34 Which number is equivalent to 16.25?

F $16\frac{2}{5}$

G $16\frac{1}{4}$

H $16\frac{1}{5}$

35 Liam has 75 cards to pass out to 6 players for a game. Each player will get an equal number of cards. Which statement best describes the greatest number of cards that could be passed out to the players?

- A** Each player will get 3 cards, and 12 cards will be left over.
- B** Each player will get 10 cards, and 5 cards will be left over.
- C** Each player will get 12 cards, and 3 cards will be left over.

Go On ►

- 36** The table below shows the weights of two boys.

Weights of Boys

Boy	Weight (pounds)
Franklin	158.7
Paul	128.9

About how many more pounds does Franklin weigh than Paul?

- F** 10 pounds
- G** 30 pounds
- H** 290 pounds

- 37** A baker made cookies.

- He made 156 cookies.
- He put 13 cookies into each package.

How many packages of cookies did the baker make?

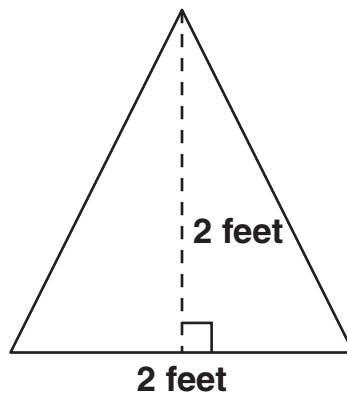
- A** 10
- B** 12
- C** 13

- 38** What is the value of the expression below, when $s = 0.75$?

$$4(s + 8)$$

- F** 11
G 24
H 35

- 39** Mary made a triangular rug, like the one modeled below.



$$\text{Area} = \frac{1}{2} \times \text{base} \times \text{height}$$

What is the area of the rug?

- A** 2 square feet
B 4 square feet
C 8 square feet

Go On ►

- 40** Amanda bought $\frac{1}{2}$ yard of blue ribbon and 0.25 yard of green ribbon. What is the total amount of ribbon that Amanda bought altogether?

F $\frac{2}{5}$ yard

G $\frac{3}{4}$ yard

H $\frac{9}{10}$ yard

- 41** The scores Amie earned in her last 5 bowling games are shown below.

84, 80, 76, 88, 87

What is the mean of Amie's scores?

A 76

B 83

C 84

42 Which statement is true?

F $4.25 = 4\frac{2}{5}$

G $4.25 < 4\frac{2}{5}$

H $4.25 > 4\frac{2}{5}$

43 Jana cut two pieces of ribbon for a project.

- She cut one piece of ribbon $2\frac{1}{6}$ yards long.
- She cut the other piece of ribbon $3\frac{4}{6}$ yards long.

Which estimate is closest to the total length, in yards, of the two pieces of ribbon?

- A** 2 yards
B 5 yards
C 6 yards

Go On ►

- 44** Look at the inequality below.

$$x - 3 \leq 7$$

Which set contains only values of x that make this inequality true?

- F** $\{8, 9, 10\}$
- G** $\{8, 10, 12\}$
- H** $\{11, 13, 15\}$

- 45** Mr. Alexander bought $5\frac{7}{8}$ yards of fabric. Mrs. Richmond bought $3\frac{1}{2}$ yards of fabric. How many total yards of fabric did Mr. Alexander and Mrs. Richmond buy altogether?

- A** $8\frac{1}{2}$
- B** $8\frac{4}{5}$
- C** $9\frac{3}{8}$

- 46** What is the value of s in the equation below?

$$8 = s - 5\frac{5}{6}$$

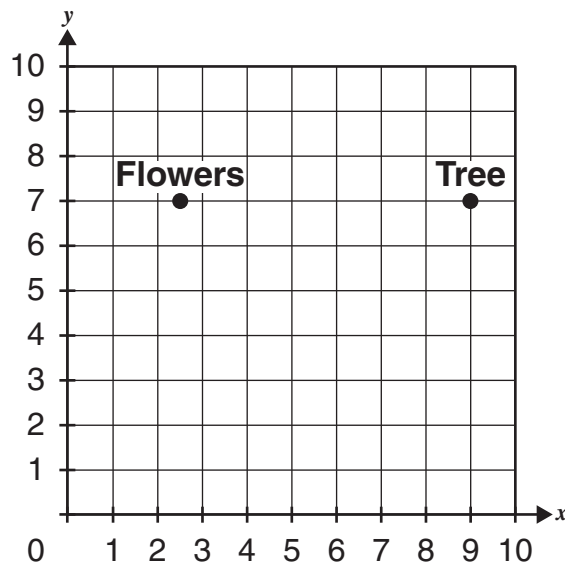
F $12\frac{1}{6}$

G $13\frac{1}{6}$

H $13\frac{5}{6}$

Go On ►

- 47** The grid below shows the locations where a tree and some flowers are planted in a park.



Which is closest to the distance between the flowers and the tree?

- A** 7 units
- B** $6\frac{1}{2}$ units
- C** 6 units

- 48** A zipper is 25.4 centimeters long. What is 25.4 written as a fraction?

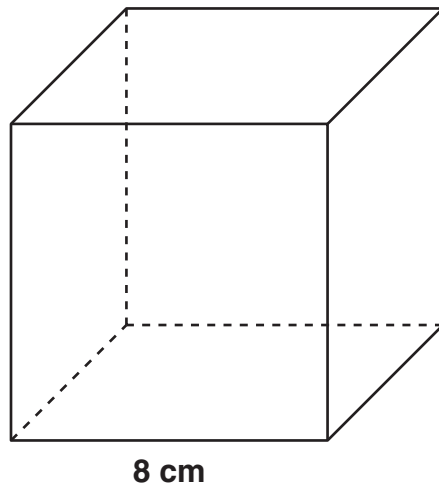
F $25\frac{1}{25}$

G $25\frac{1}{4}$

H $25\frac{2}{5}$

Go On ►

- 49** A cube is shown below. The edge length of the cube is 8 centimeters.



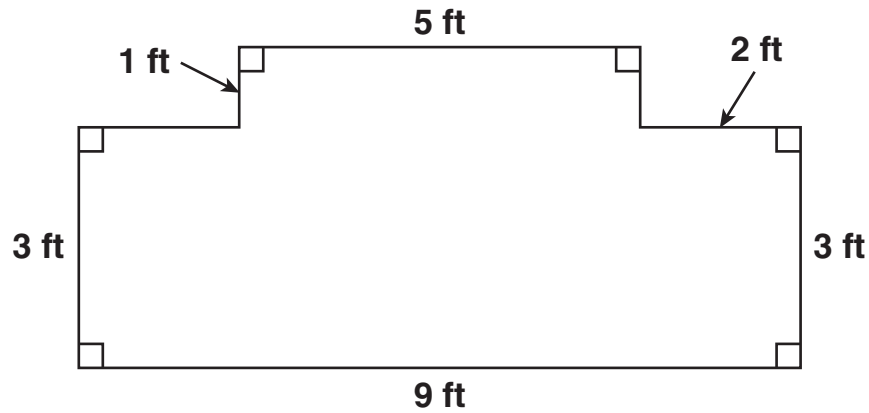
$$\text{Surface Area} = 2(l \times h) + 2(w \times h) + 2(l \times w)$$

$$l = \text{length} \quad w = \text{width} \quad h = \text{height}$$

What is the surface area of this cube?

- A** 192 square centimeters
- B** 384 square centimeters
- C** 512 square centimeters

- 50** What is the area of the figure below in square feet?



Area of Rectangle = length \times width

- F** 23 square feet
- G** 27 square feet
- H** 32 square feet

Go On ►

51 Evaluate: $\frac{1}{3} + \frac{1}{2} \times \frac{1}{2}$

A $\frac{2}{7}$

B $\frac{5}{12}$

C $\frac{7}{12}$

STOP 

**DO NOT
MARK
ON THIS
PAGE**

**DO NOT
MARK
ON THIS
PAGE**

Science



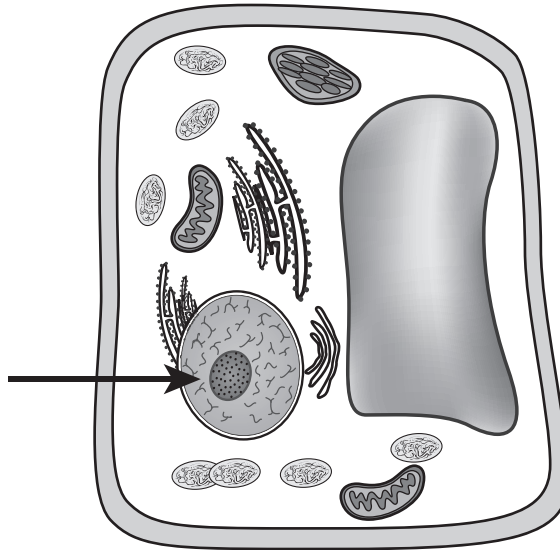
Part 1

- 1** Which bird has a beak that is best adapted for drinking nectar from flowers?



Go On ►

2 The diagram shows a cell.



The arrow points to which structure?

- F** nucleus
- G** vacuole
- H** cytoplasm

3 Small pieces of ice are broken off a large block of ice. Compared to the block of ice, the pieces of ice will completely melt

- A** at a faster rate.
- B** at a slower rate.
- C** at the same rate.

- 4** The table shows information about four planets.

Planet Information

	Earth	Jupiter	Saturn	Neptune
Distance from the Sun (in millions of kilometers)	150	778	1,427	4,497
Mass of Planet (Earth = 1)	1	317.9	95.2	17.1
Number of Observed Moons	1	62	60	13

Which conclusion is best supported by this information?

- F** The farther the planets are from the sun, the more moons they have.
- G** The greater the mass of the planets, the fewer moons they have.
- H** The planet with the smallest mass has the fewest number of moons.

- 5** A student is looking for a constellation in the night sky. Which tool should the student use to find the correct direction?

- A** binoculars
- B** compass
- C** telescope

Go On ►

- 6** When walking near a park, a student often sees birds like the one shown below.



© Mr. Jamsey/Stockphoto #1447256

The student wants to find out how these birds get the energy they need to live. Which investigation would best help the student answer this question?

- F** observe what these birds eat every day for one week
- G** ask the teacher if other animals eat these birds
- H** use the Internet to learn where these birds migrate

7 Which human activity would most threaten the survival of a species that lives in a river?

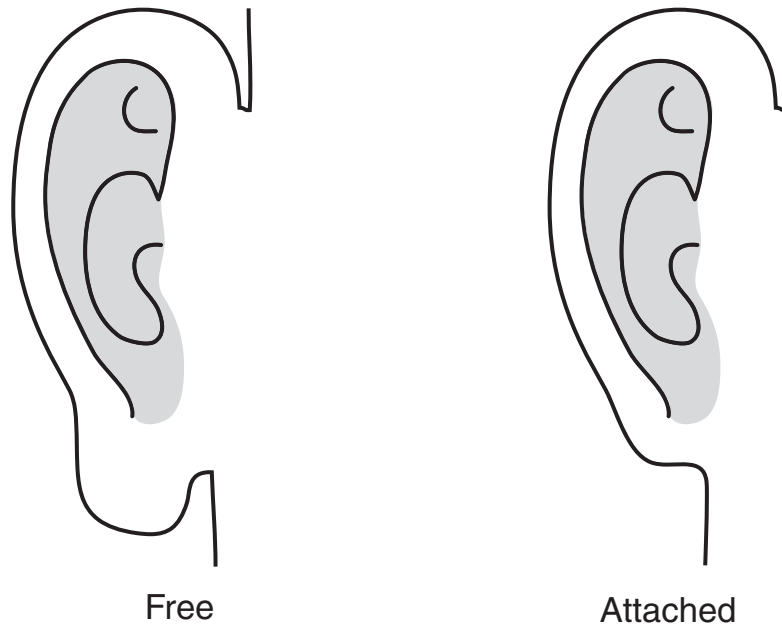
- A** planting native trees near the river
- B** collecting water samples from the river
- C** using pesticides on farmland near the river

8 Which best describes why cities near oceans are often warmer in the winter than inland cities at the same latitude?

- F** Oceans cool more slowly than land.
- G** The moon heats the air over the ocean.
- H** Waves move more quickly in the winter.

Go On ►

- 9** The drawing shows two different types of earlobes in humans.



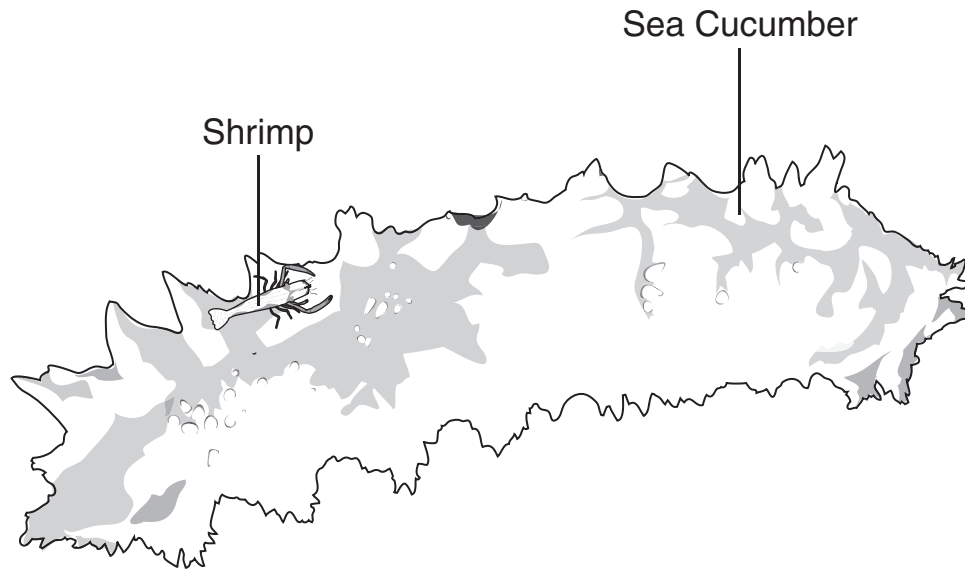
Which factor most affects whether a student has free or attached earlobes?

- A** the environment in which the student lives
- B** the genes inherited from the parents of the student
- C** the hearing ability of the student

- 10** A metal spoon is placed in a cup of hot water. Heat from the water is transferred to the spoon mostly by

- F** conduction.
- G** convection.
- H** radiation.

- 11** Some shrimp can travel from one place to another by riding on a sea cucumber, as shown in the diagram below.

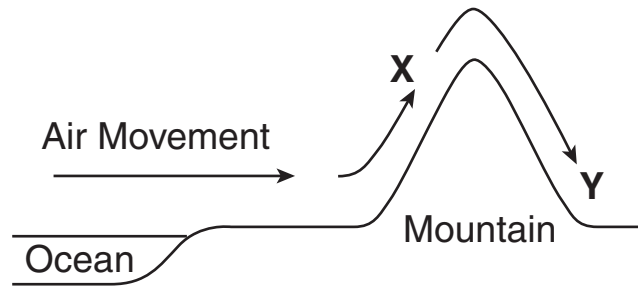


The sea cucumber is neither helped nor harmed by the presence of the shrimp. Which term best describes this relationship?

- A** commensalism
- B** mutualism
- C** competition

Go On ►

- 12** The diagram shows the movement of air over a mountain.



The air at Y is most likely

- F** colder than at X.
- G** drier than at X.
- H** cloudier than at X.

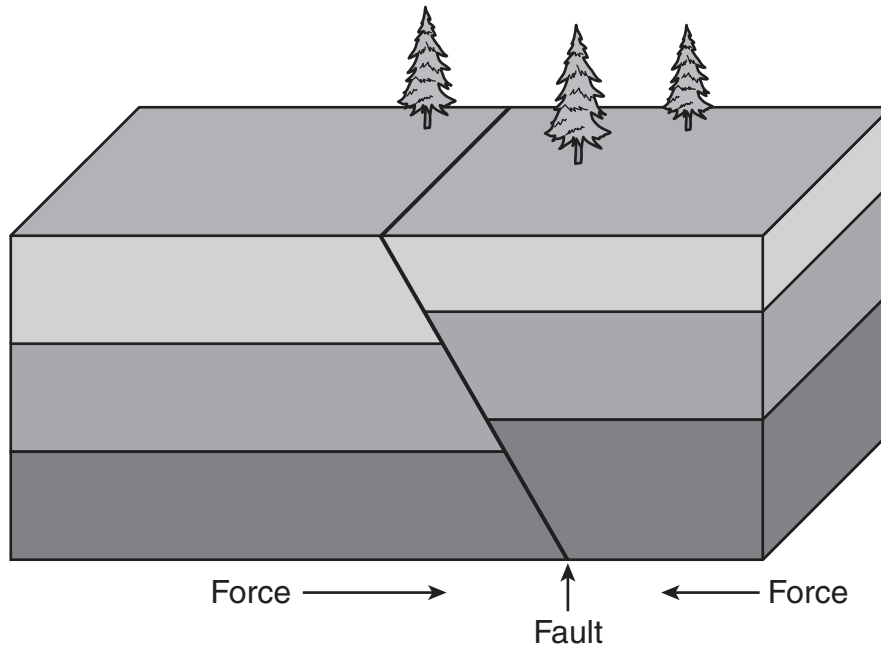
- 13** Three objects were dropped at the same time from the same height. Which object will most likely take the longest time to drop?

- A** an iron ball
- B** a large book
- C** an open umbrella

- 14** Newton's understanding of gravity was important for the development of which technology?

- F** a satellite that orbits Earth
- G** a car powered with corn oil
- H** robots that help with daily tasks

- 15** The diagram shows a fault in the surface of Earth.



Which of these will most likely result as movement occurs along this fault?

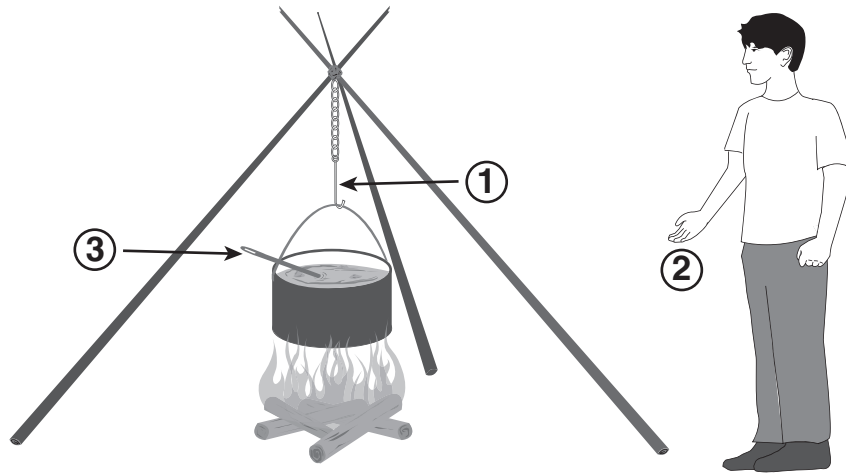
- A** a hot spring
- B** a volcano
- C** an earthquake

- 16** One difference between plant and animal cells is that

- F** only animal cells have a cell membrane.
- G** only animal cells have a chloroplast.
- H** only plant cells have a cell wall.

Go On ►

- 17** The diagram shows a pot of stew being heated by a fire.



Which object is heated mostly by radiation from the fire?

- A** 1
- B** 2
- C** 3

- 18** Which statement best describes how a hawk obtains energy differently than an oak tree?

- F** The hawk absorbs energy from the sun.
- G** The hawk breathes in carbon dioxide.
- H** The hawk consumes other organisms.

- 19** The picture shows the fossilized skull of an extinct animal.



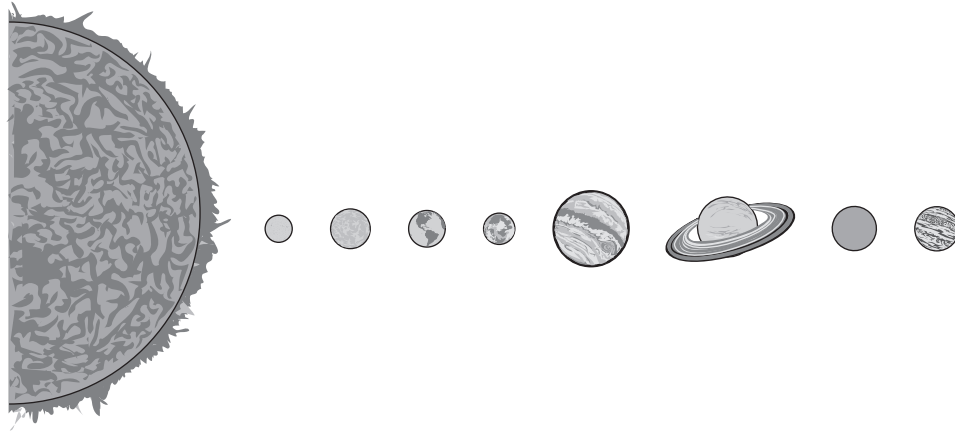
© Mikelegray/Dreamstime #57879

What did this animal most likely eat?

- A** grasses
- B** insects
- C** other animals

Go On ►

20 Our solar system is shown below.

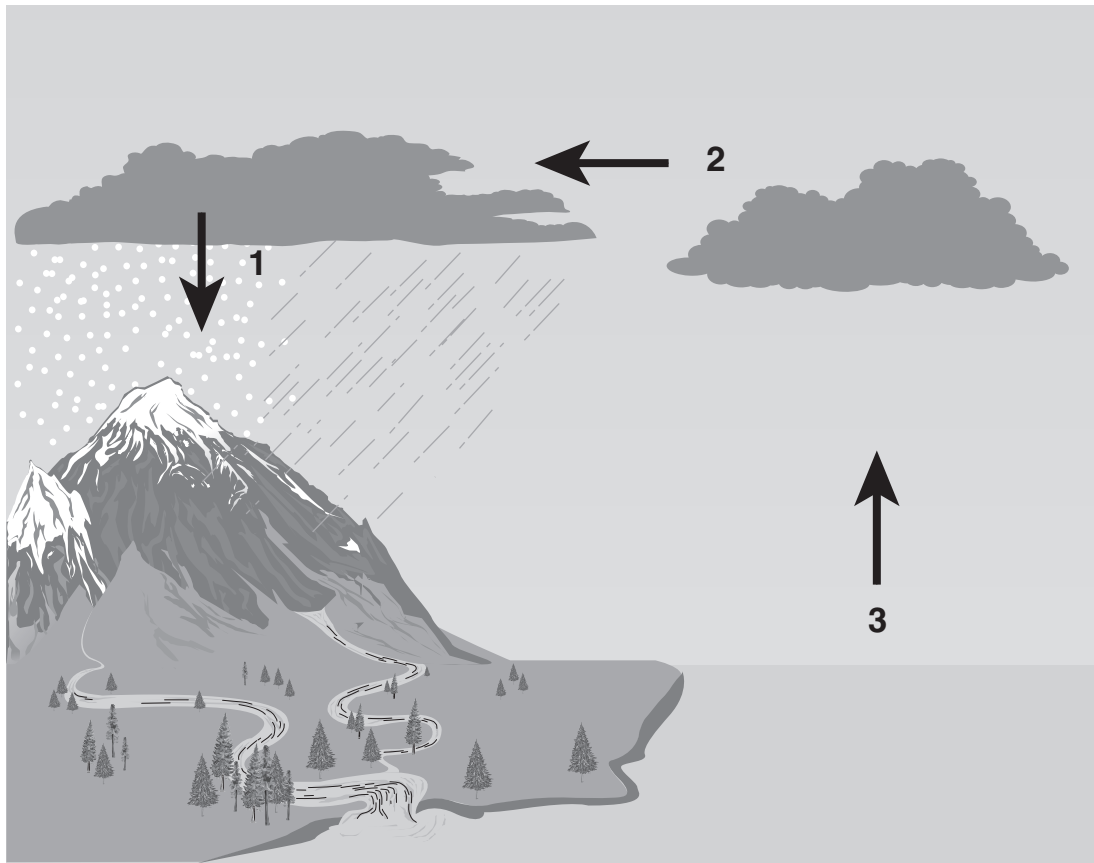


Which planet is farthest from the sun?

- F** Mars
- G** Neptune
- H** Saturn

- 21** A diagram of the water cycle is shown.

Water Cycle



Which arrow on the diagram represents evaporation?

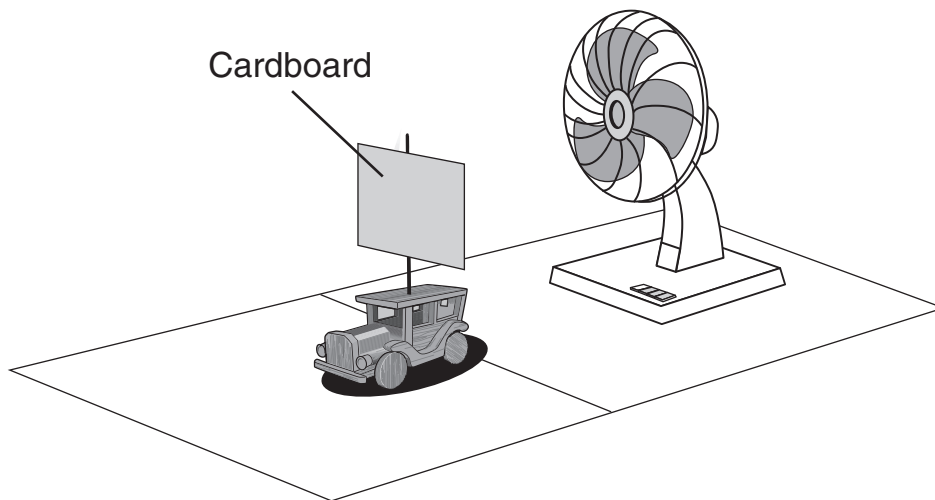
- A** 1
- B** 2
- C** 3

Go On ►

22 Which helps keep a satellite in orbit around Earth?

- F** the magnetic force of Earth
- G** the electrical charge of Earth
- H** the gravitational pull of Earth

23 An investigation using a fan and a wooden car is shown.



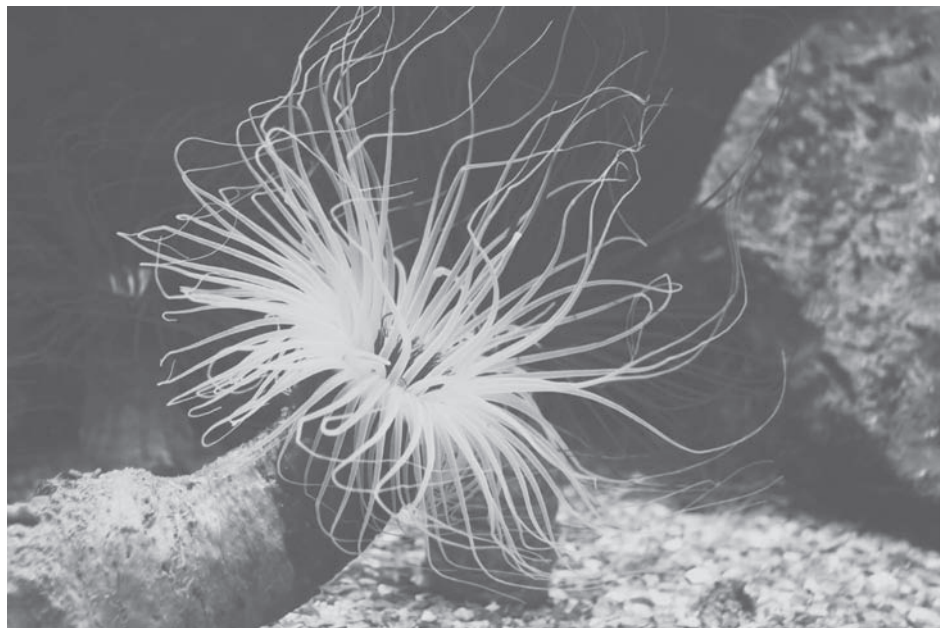
Which of these will increase the distance the car will travel?

- A** change the direction the car is pointed
- B** make the size of the cardboard larger
- C** decrease the speed of the fan

24 A flea gets energy by feeding on the blood of a dog. Which statement best describes the relationship between the flea and the dog?

- F** Both the flea and the dog are unaffected.
- G** The flea is helped and the dog is harmed.
- H** The flea is not affected and the dog is helped.

25 This is an animal called a sea anemone. It uses stinging cells to catch prey.



© Norbert Bieberstein/Stockphoto #6547875

The sea anemone most likely gets energy directly from

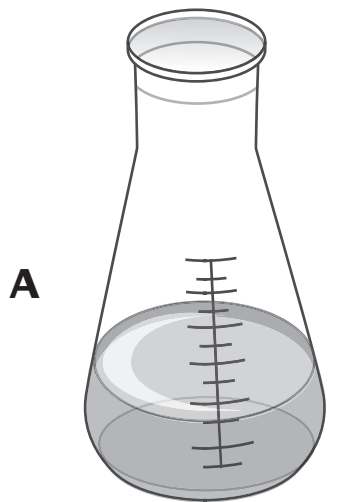
- A** sunlight.
- B** ocean water.
- C** other organisms.

Go On ►

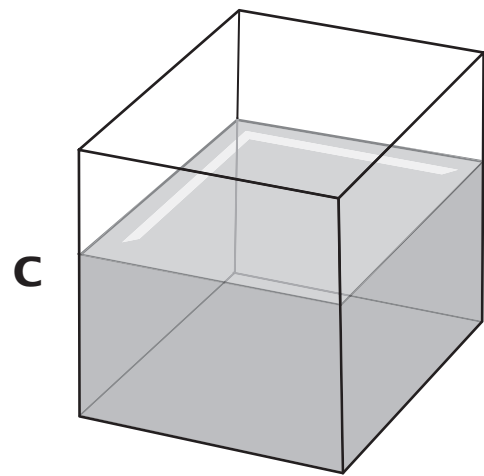
26 Which of these most likely results from plate movement?

- F** sandy beaches
- G** mountain ranges
- H** ocean currents

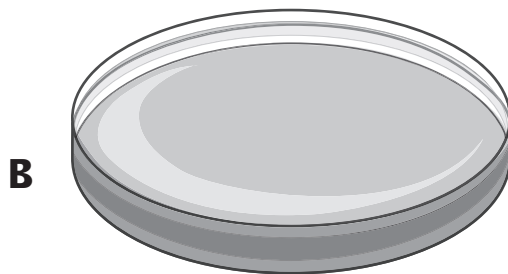
27 Three containers of water are placed outside on a windy day. In which open container will the water most likely evaporate the fastest?



100 mL of Water



100 mL of Water



100 mL of Water

- 28** The table below shows information about four planets in the solar system.

Planet Information

Planet	Type	Approximate distance from the sun (million km)	Mass (x 10 ²¹ kg)
Mercury	Rocky	57.9	330.2
Venus	Rocky	108.2	4,868.5
Jupiter	Gaseous	778.3	1,899,000
Saturn	Gaseous	1,427.0	568,460

Which conclusion can best be made from this information?

- F** The rocky planets are farther from the sun than the gaseous planets.
- G** The closer planets are to the sun, the greater the mass.
- H** The gaseous planets have more mass than the rocky planets.

- 29** The invention of the refrigerator best helps people by

- A** reducing the use of electricity.
- B** slowing the growth of bacteria in food.
- C** decreasing the time to prepare food.

Go On ►

30 Which structures are found in both plant and animal cells?

F chloroplast and cytoplasm

G vacuole and cell wall

H nucleus and vacuole

31 Four objects were dropped from a height of 10 meters. The order in which they reached the ground is shown in the table.

Falling Objects

Object	Order
Feather	3rd
Golf Ball	1st
Sheet of Notebook Paper	4th
Foam Ball	2nd

The sheet of paper took the longest time to reach the ground most likely because it has the greatest

A mass.

B surface area.

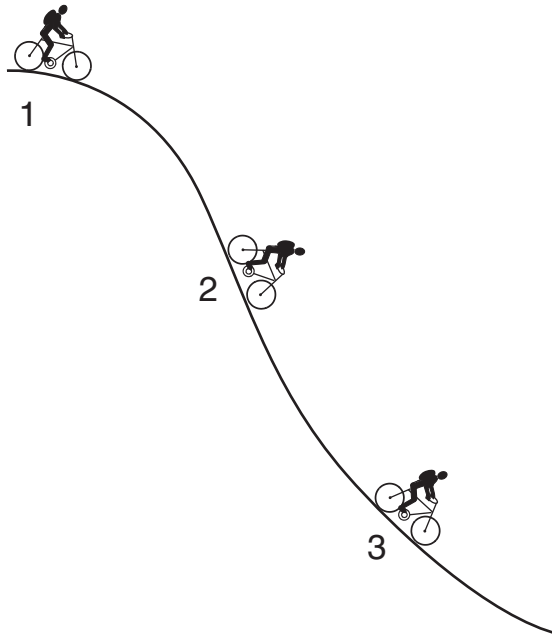
C weight.

STOP 

**DO NOT
MARK
ON THIS
PAGE**

Part 2

32 The picture shows a student riding a bicycle down a hill.



At which point do the student and the bicycle have the greatest potential energy?

F 1

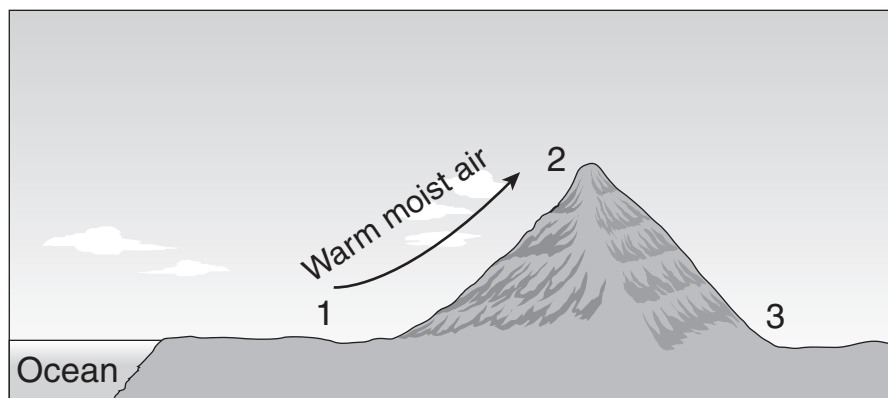
G 2

H 3

33 A certain type of mite is a parasite of honeybees. Which statement best describes the relationship between the mites and honeybees?

- A** The mites harm the honeybees by feeding on their blood.
- B** The mites get honey in return for helping the honeybees stay healthy.
- C** The mites help the honeybees find food but get nothing in return.

34 The diagram shows warm, moist air rising as it moves up a mountain.



Which of the numbered areas will have the most precipitation?

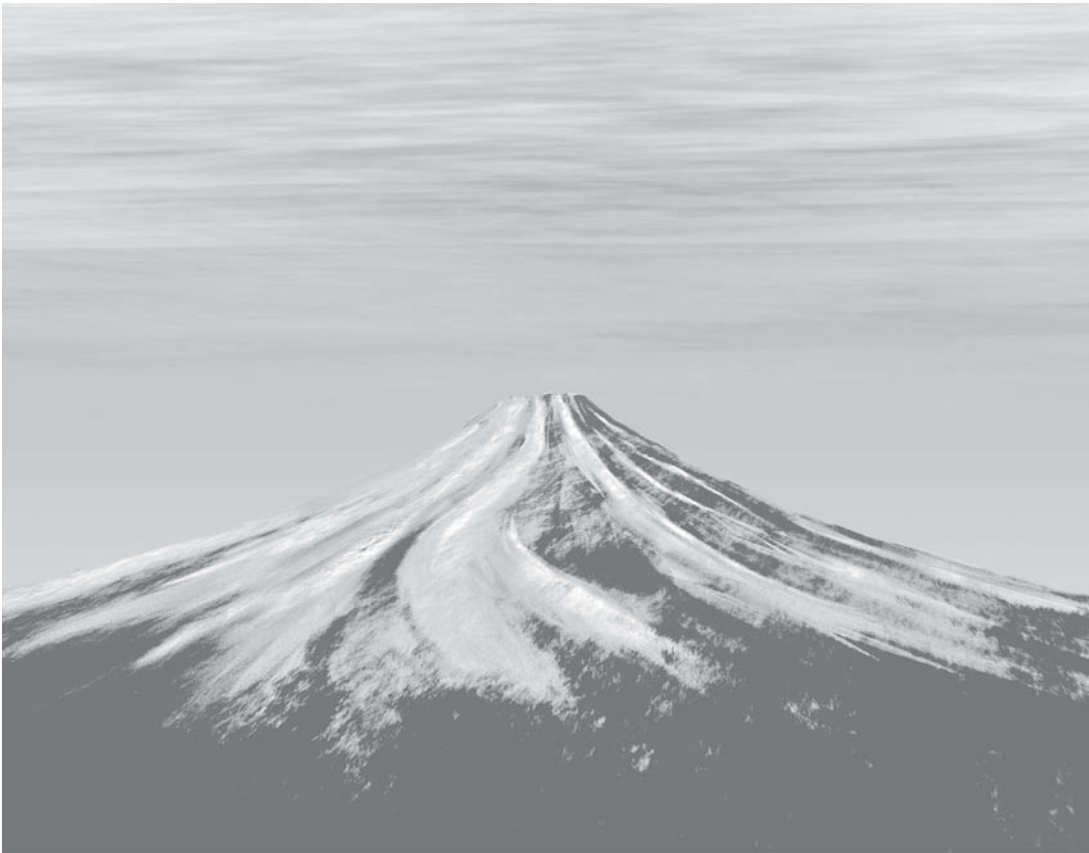
- F** 1
- G** 2
- H** 3

Go On ►

35 Which of these has the greatest effect on how tall a student will grow?

- A** genetic material from both parents
- B** only genetic material from the mother
- C** only genetic material from the father

36 The picture shows a land feature.



Which event most likely formed this feature?

- F** two crustal plates sliding past each other
- G** rivers depositing large amounts of sand
- H** hot liquid rock moving to the surface

37 Which process allows plants to convert energy from the sun into food?

- A** germination
- B** photosynthesis
- C** pollination

38 How will a decrease in habitat size affect organisms in the area?

- F** Several species will migrate to the area.
- G** More animals will be born in the area.
- H** Some populations will become threatened in the area.

39 Telescopes in space helped improve the understanding of outer space by advancing the ability to

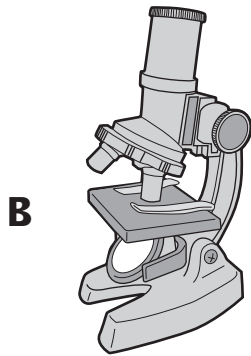
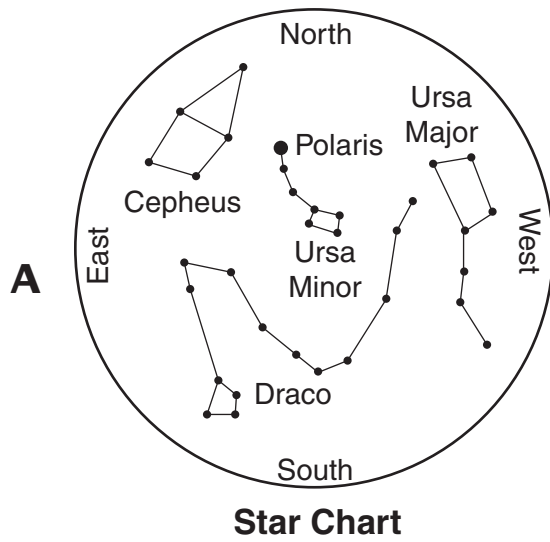
- A** take samples from objects in space.
- B** communicate into space.
- C** observe objects in more detail in space.

40 Which phase change takes place when heat energy is removed from water?

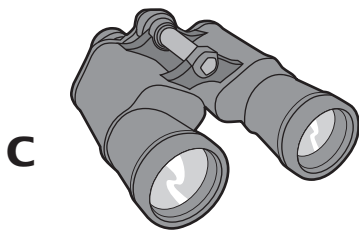
- F** liquid to gas
- G** liquid to solid
- H** solid to gas

Go On ►

- 41** Which tool is best for astronomers to use when identifying constellation patterns?



Microscope



Binoculars

42 Which is a physical property?

- F** the ability to rust in water
- G** the ability to melt when heated
- H** the ability to burn in oxygen

43 The picture shows a girl jumping rope.



The girl always lands back on the ground after each jump because

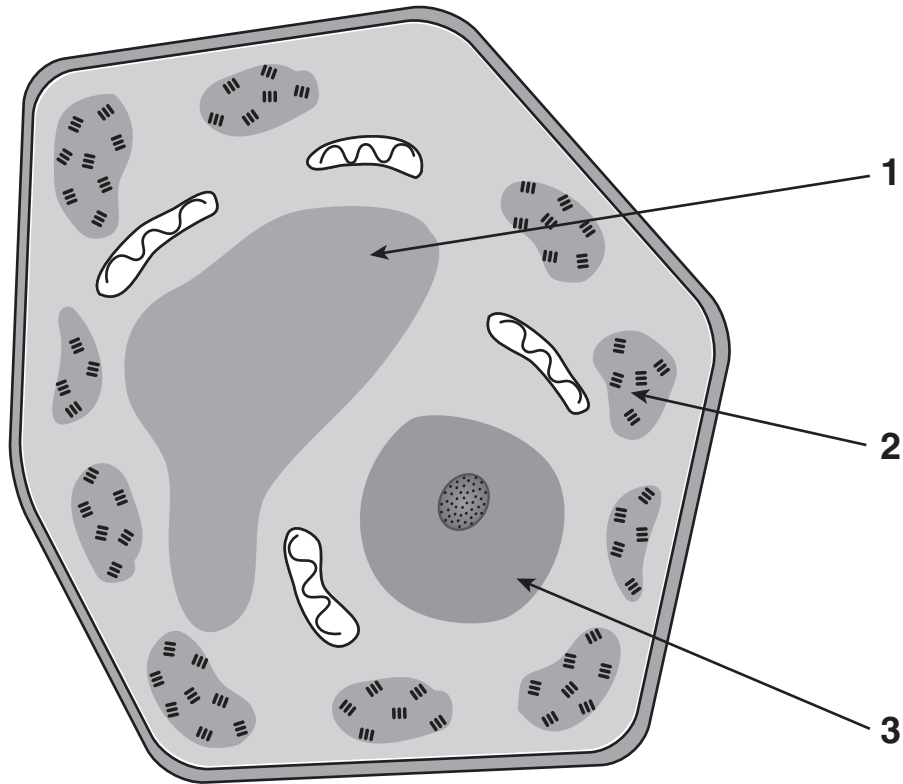
- A** air resistance pushes her down.
- B** the force of gravity pulls her down.
- C** a magnetic force pulls her down.

Go On ►

44 A student is investigating to find out if the composition of ice cubes affects how long it takes them to melt. Which step is best to do after freezing pure water, sugar water, and salt water in 3 identical ice cube trays?

- F** place each tray on a different table in the same room
- G** place each tray on a table in different rooms
- H** place the trays side by side on the same table

45 A cell is shown.






Which cell part is the vacuole?

- A** 1
- B** 2
- C** 3

Go On ►

- 46** The three objects shown in the table will be dropped from a height of 10 meters.

Data Table

Object		Drop Time (sec)
	Ball	
	Pencil	
	Handkerchief	

The handkerchief will most likely have the longest drop time because of its

- F** length.
- G** shape.
- H** texture.

- 47** The table gives some information about four of the planets in the solar system.

Planet Information

Planet	Approximate distance from the sun (kilometers)	Diameter (kilometers)
Mercury	57 million	4,876
Venus	107 million	12,107
Earth	150 million	12,755
Mars	229 million	6,794

Which planet is closest in size to Earth?

- A** Venus
- B** Mars
- C** Mercury

- 48** Which trait does a child inherit from her parents?

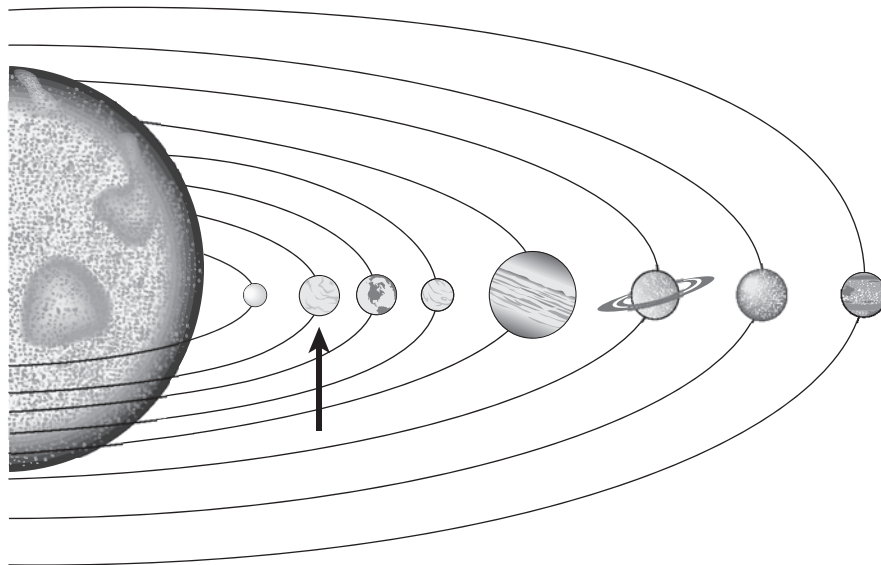
- F** learning to swim
- G** color of eyes
- H** style of clothing

Go On ►

49 A different force is applied to a football each time it is thrown. Which force will most likely cause the same football to travel the shortest distance before hitting the ground?

- A** 10 newtons
- B** 15 newtons
- C** 20 newtons

50 A diagram of our solar system is shown.



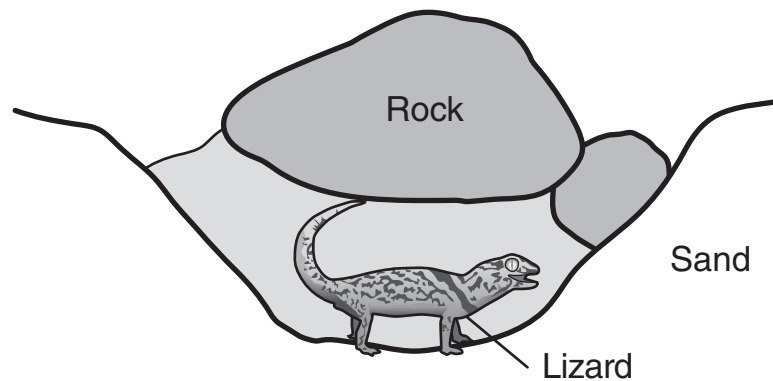
The arrow points to which planet?

- F** Saturn
- G** Venus
- H** Uranus

51 After a student throws a ball up in the air, the ball falls down to the ground. Which type of force always acts upon the ball to pull the ball to the ground?

- A** electrical
- B** frictional
- C** gravitational

52 The diagram shows a lizard hiding under a rock during daylight hours.



The lizard is most likely responding to

- F** lack of rain in the area.
- G** high temperatures of the region.
- H** shifting sand of the environment.

Go On ►

53 Photosynthesis is the process of

- A** using sunlight to make food from carbon dioxide and water.
- B** breaking down materials by wind, water, or temperature change.
- C** forming clouds through evaporation and condensation.

- 54** Small birds feed on parasites, such as ticks, living on a hippopotamus as shown below.

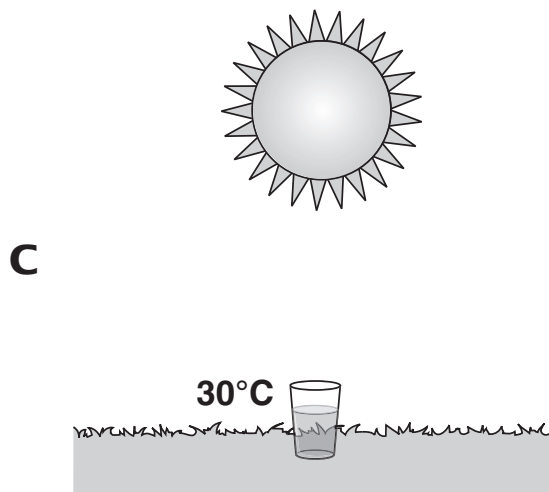
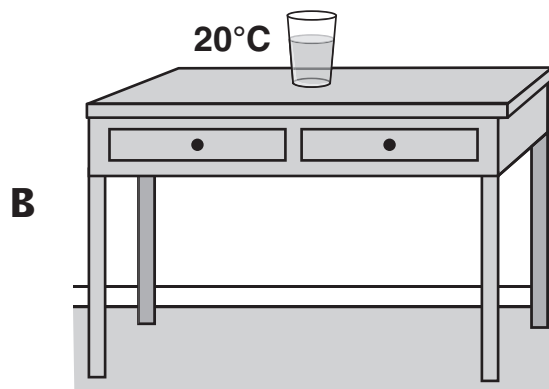
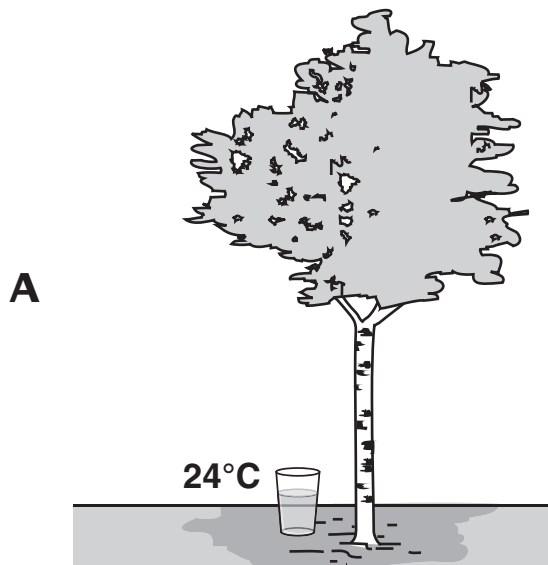


The relationship between the bird and the hippopotamus is best described as

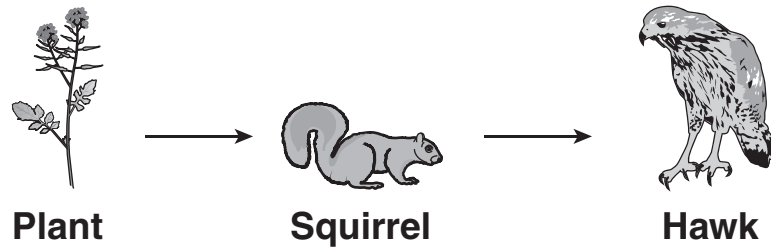
- F** mutualistic.
- G** parasitic.
- H** commensal.

Go On ►

- 55** In which location will a glass of water most likely evaporate the fastest?



56 A food chain is shown.

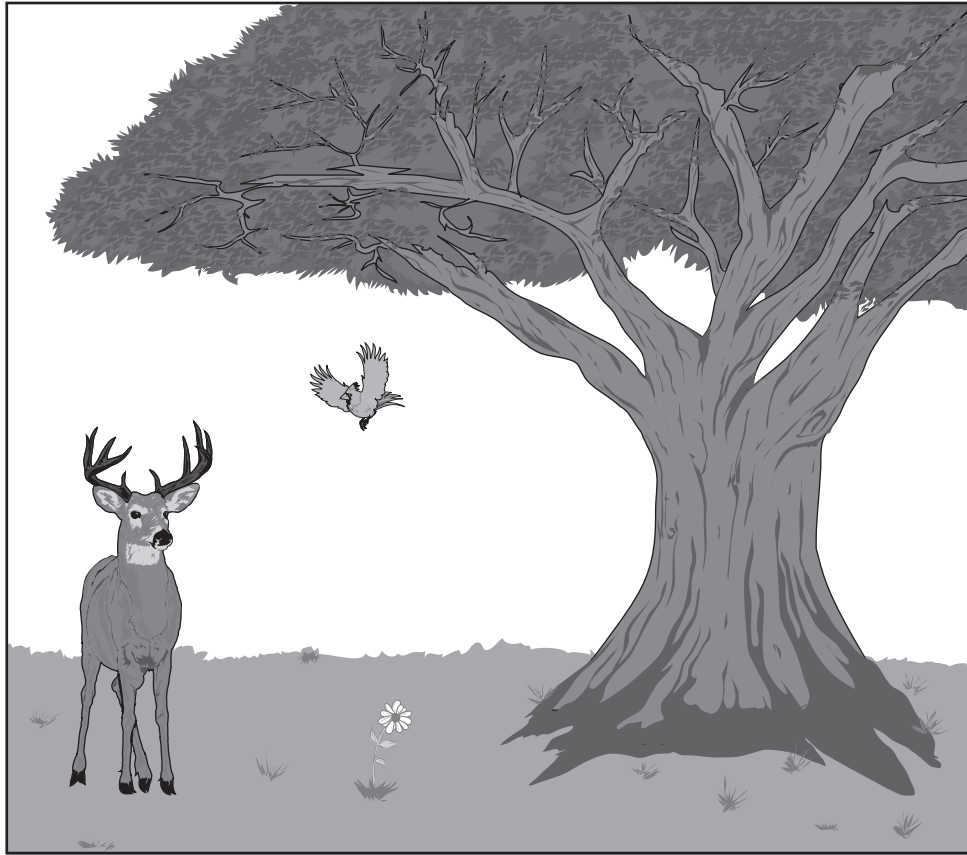


Which organism in the food chain is a predator?

- F** Plant
- G** Squirrel
- H** Hawk

Go On ►

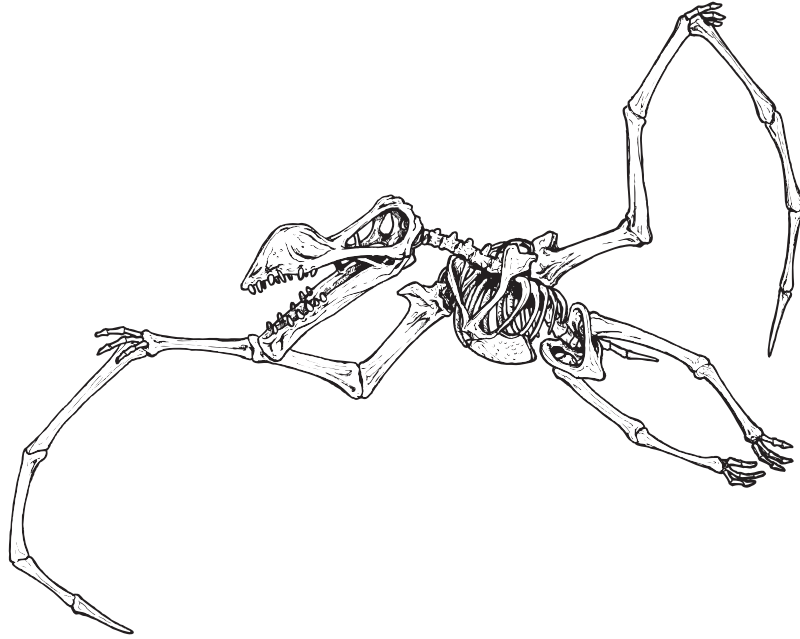
57 Some organisms are shown in the drawing below.



Which statement best compares how these organisms get energy?

- A** The tree, grass, and flower make food, and the deer and bird must eat food.
- B** The deer and bird make food, and the tree, grass, and flower must eat food.
- C** The deer, flower, bird, grass, and tree all make food.

- 58** A drawing of a fossil is shown.



Which is the best conclusion about the animal that this fossil came from?

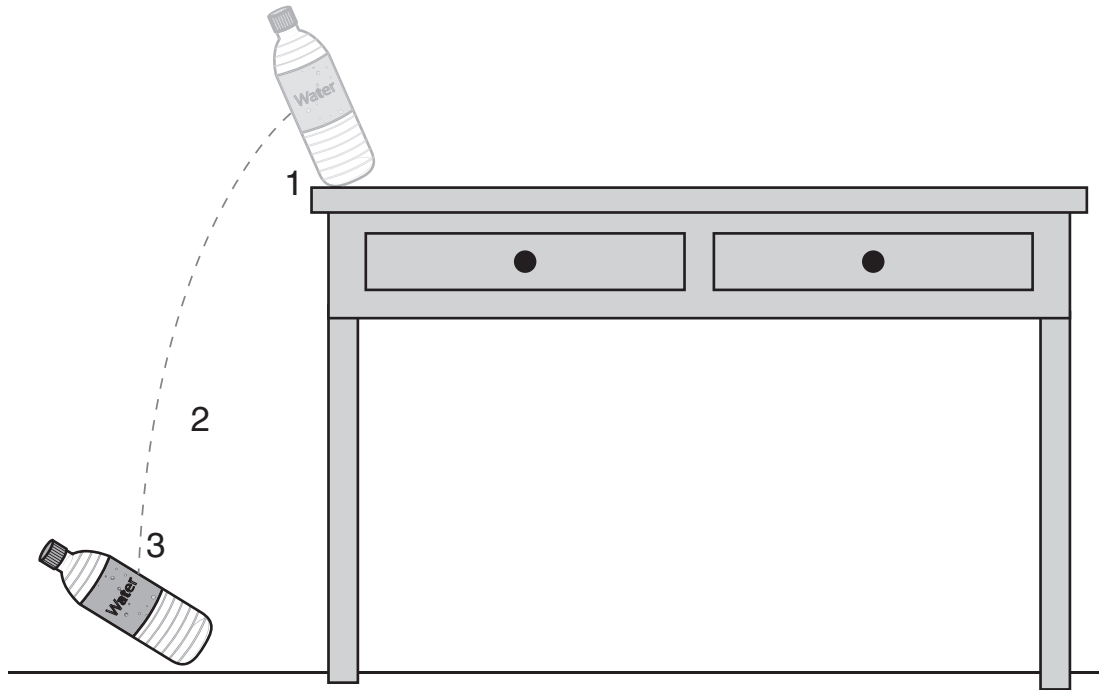
- F** The animal had the ability to fly.
- G** The animal was a plant eater.
- H** The animal traveled in a pack.

- 59** Which characteristic does a puppy inherit from its parents?

- A** brown eye color
- B** a cut on its paw
- C** trimmed coat of hair

Go On ►

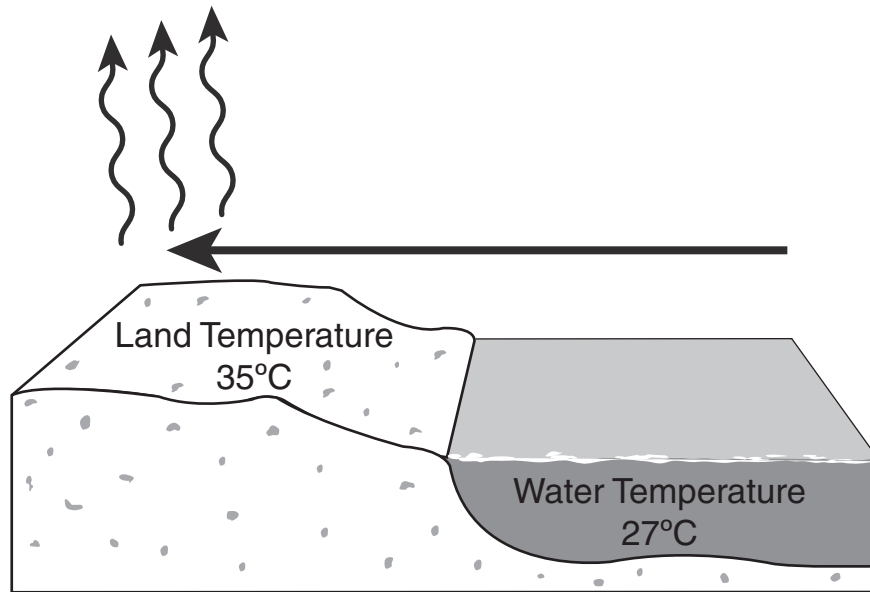
- 60** The diagram shows a water bottle knocked off a desk.



At what position during the fall does the water bottle have the most kinetic energy?

- F** 1
- G** 2
- H** 3

61 A diagram of land and ocean temperatures is shown.



This diagram illustrates the

- A** cause of sea breezes.
- B** movement of crustal plates.
- C** formation of a hurricane.

STOP 

**DO NOT
MARK
ON THIS
PAGE**

Social Studies



Part 1

- 1** America's culture can best be represented by its
 - A** art.
 - B** climate.
 - C** wildlife.

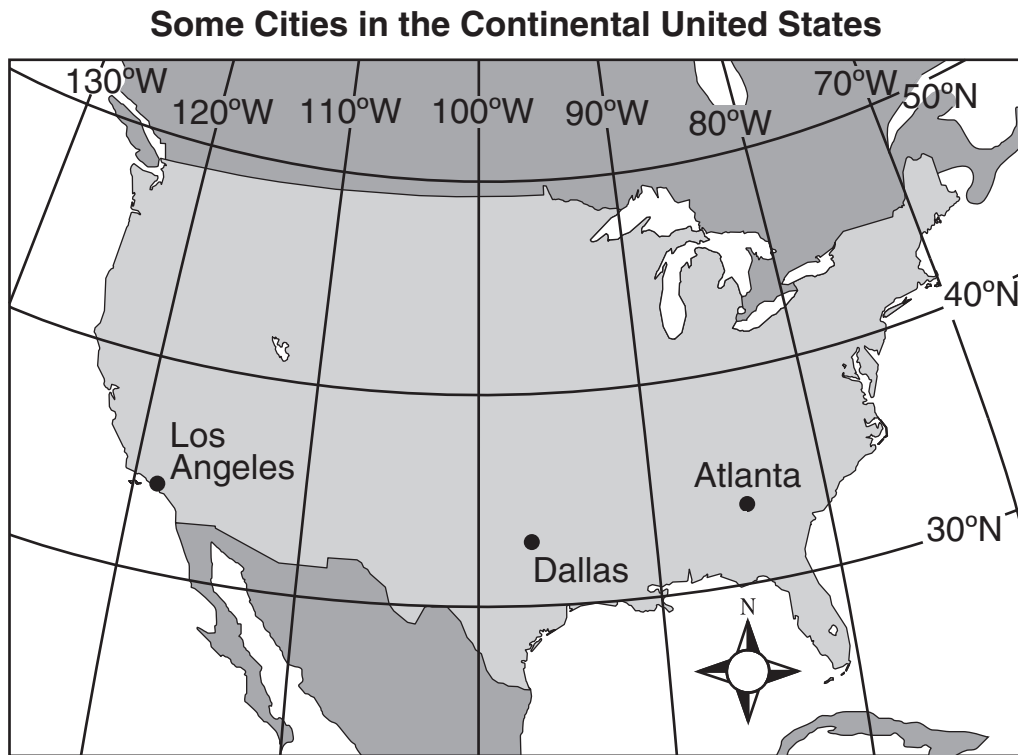
- 2** Which consumer goods were most often purchased by Americans using credit in the 1920s?
 - F** movie tickets
 - G** washing machines
 - H** school supplies

- 3** Which of these geographical features is found in West Tennessee?
 - A** the Cumberland River
 - B** the Gulf Coastal Plain
 - C** the Great Smoky Mountains

Go On ►

4 During the 1960s and 1970s, a goal of the American Indian Movement (AIM) was to

- F** create laws protecting child safety.
- G** gain rights promised by the government.
- H** organize labor unions for farm workers.



Source: National Atlas of the United States

5 Which city is located nearest 35°N and 80°W?

- A** Los Angeles
- B** Dallas
- C** Atlanta

6 Women are guaranteed the right to vote by which amendment to the United States Constitution?

F 13th Amendment

G 15th Amendment

H 19th Amendment

Go On ►

Directions



7

- A** They stayed in the Union.
B They banned slavery first.
C They remained neutral.

8 According to the map, which of these states fought against the Confederacy?

F Florida

G Michigan

H Texas

.....

9 The result of the U.S. Supreme Court decision in *Brown v. Board of Education* was the

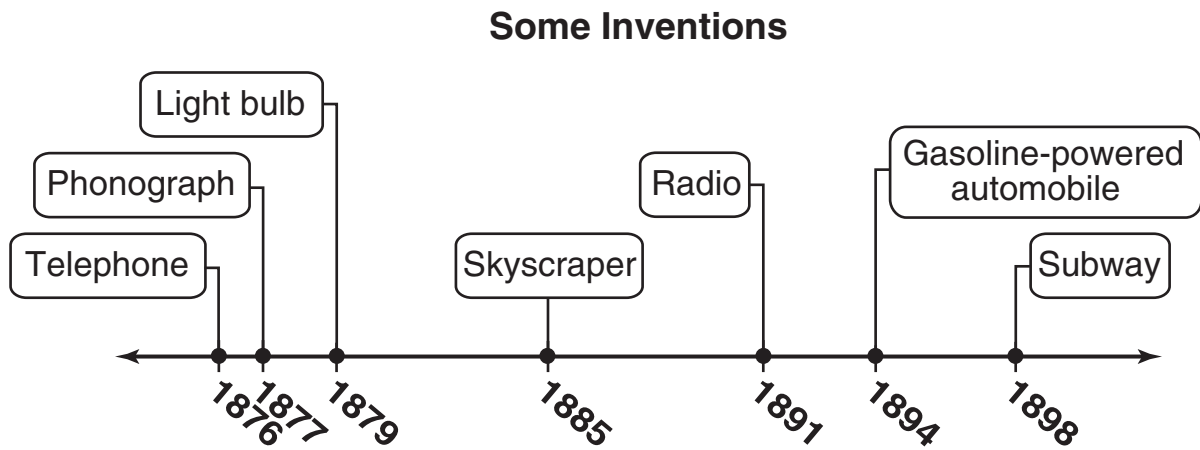
A desegregation of public schools.

B elimination of import taxes.

C removal of voting restrictions.

Go On ►

Directions Use the timeline below to do Number 10.



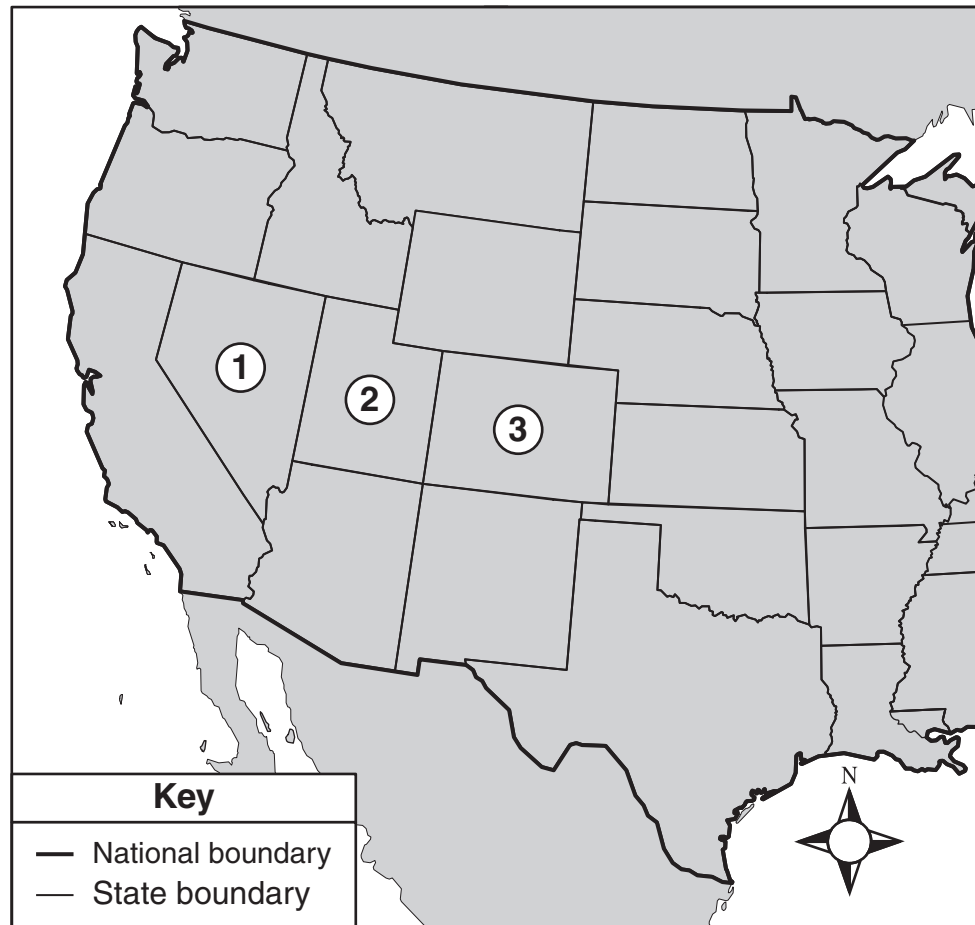
10 According to the timeline, which of these could people do first?

- F** listen to a radio
 - G** ride on a subway
 - H** talk on a telephone
-

11 In the late 1800s, workers most often demanded better

- A** pay.
- B** vacations.
- C** medical care.

Continental United States West of the Mississippi River



12 Which number on the map above marks a state that borders both California and Idaho?

F 1

G 2

H 3

Go On ►

Directions Use the chart below to do Numbers 13 and 14.

Year	Automobiles Registered in the United States (in millions)
1960	62
1980	122
2000	134

Note: Numbers are approximate.
Source: Vehicle Facts and Figures,
Motor Vehicle Manufacturers Association
of the United States

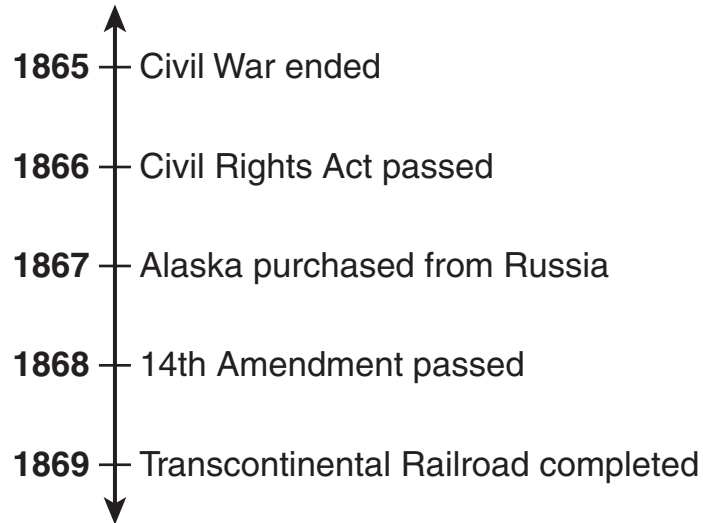
13 Approximately how many automobiles were registered in the United States in 1960?

- A** 134 million
- B** 122 million
- C** 62 million

14 In which of these years was the highest number of cars registered in the United States?

- F** 1960
- G** 1980
- H** 2000

Some Events in the United States, 1865 – 1869



15 Which of these statements is supported by the timeline above?

- A** The United States continued to grow after the Civil War ended.
- B** The Transcontinental Railroad was finished before the Civil Rights Act.
- C** The 14th Amendment led to the purchase of Alaska.

Go On ►

Directions Use the chart below to do Numbers 16 and 17.

Data for Some Counties in Tennessee

County	Population 1980	Population 1990	Population 2000
Bedford	28,000	30,000	38,000
Davidson	478,000	511,000	570,000
Haywood	20,000	19,000	20,000

Source: United States Bureau of the Census

16 Which of these is a true statement about the counties listed?

- F** The largest city is most likely found in Davidson County.
- G** The population of all the counties increased between 1980 and 2000.
- H** The population of Davidson County will most likely go down in 2010.

17 Based on the information in the chart, which of these counties had the slowest rate of growth from 1990 to 2000?

- A** Bedford
- B** Davidson
- C** Haywood

18 Which person is responsible for leading a local city government?

- F** judge
- G** mayor
- H** senator

19 Which natural feature forms most of the eastern border of Tennessee?

- A** Mississippi River
- B** Appalachian Mountains
- C** Cumberland Plateau

We moved into our house last Wednesday. I suppose you would like to see us in our sod house. . . . The only objection I have [is that] we have no floor yet . . .

— Letter from Mattie V. Oblinger, 1873

20 What can the reader tell about Mattie Oblinger's house from the passage above?

- F** It was stronger than a cabin.
- G** It needed to be finished.
- H** It could be moved on a wagon.

Go On ►

Accomplishments of Governor _____?

State of Tennessee improvements:

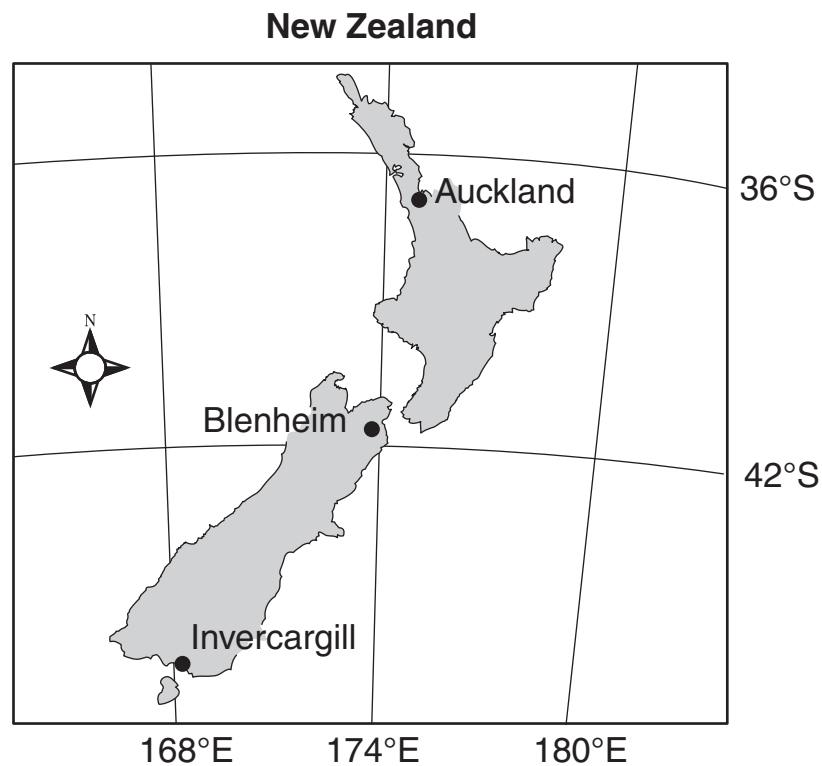
- State government
- Public education
- Transportation

21 Which person best completes the title of the list above?

- A** Buford Ellington
- B** William Blount
- C** Austin Peay

22 Which of these statements describes life on the Great Plains in the late 1800s?

- F** There was a high level of air pollution.
- G** Most people worked in large factories.
- H** People lived far away from each other.



- 23** Which of these cities is located nearest 36°S , 174°E ?
- A** Auckland
 - B** Blenheim
 - C** Invercargill
- 24** Clara Barton is famous for helping injured soldiers during the
- F** French and Indian War.
 - G** Revolutionary War.
 - H** Civil War.

Go On ►

**Populations of California
and Pennsylvania, 1900 and 2000**

Year	California	Pennsylvania
1900	1,485,053	6,302,115
2000	33,871,648	12,281,054

- 25** According to the table above, the population of Pennsylvania
- A** was younger than the population in California.
 - B** grew more slowly than the population of California.
 - C** lost population to California.
- 26** What role did Jefferson Davis have during the Civil War?
- F** He was the president of the Confederacy.
 - G** He was a general in the Union Army.
 - H** He was a justice in the U.S. Supreme Court.
- 27** Congress is preparing to pass a spending bill. Which item listed below is a national need?
- A** holiday fireworks
 - B** soldiers' salaries
 - C** shopping malls

28 What do Americans celebrate on Columbus Day?

- F** the efforts of leaders in the Civil Rights movement
- G** the exploration of the Americas by European sailors
- H** the United States declaration of independence from Great Britain

29 Which of the events below would need conflict resolution?

- A** Two boys shout angrily at each other on the playground.
- B** A group of children leave an unlocked bicycle on the grass.
- C** Students put posters in the hall during a class election.

30 Which of these was the main purpose of the Bill of Rights?

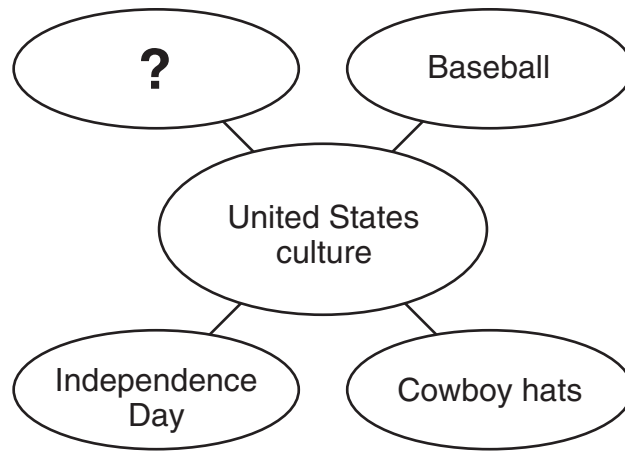
- F** to break ties with another country
- G** to guarantee personal freedoms
- H** to create a new form of government

31 Which of these happened on Black Tuesday in 1929?

- A** Pearl Harbor was attacked.
- B** Prices of stocks fell.
- C** War broke out in Europe.

Part 2

- 32** The Mississippi River forms the western border of
- F** California.
 - G** Tennessee.
 - H** New Jersey.
-
- 33** Which of these is the best example of a person using credit?
- A** A farmer trades his eggs for another farmer's milk.
 - B** A girl pays cash at the store for a new basketball.
 - C** A man borrows money from a bank to start a business.

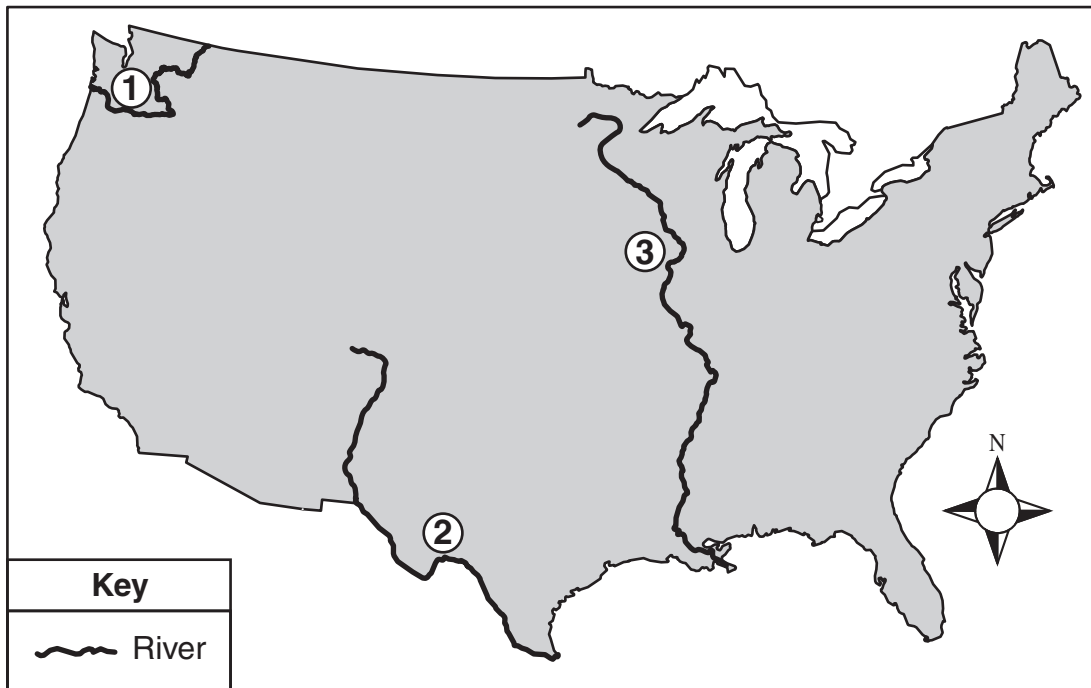


34 Which of these best completes the diagram above?

- F** Black bears
- G** Bluegrass music
- H** Hudson River

Go On ►

Some Rivers of the United States



35 Which number on the map above shows the Rio Grande?

- A** 1
- B** 2
- C** 3

1860 Population of Some Confederate States

State	White	Slave
South Carolina	291,300	402,406
Tennessee	826,722	275,719
Virginia	1,047,299	490,865

Source: U.S. Census, 1860

36 Based on the table above, which state had more slaves than white people?

- F** South Carolina
- G** Tennessee
- H** Virginia

37 Unlike the Declaration of Independence, the United States Constitution outlines the

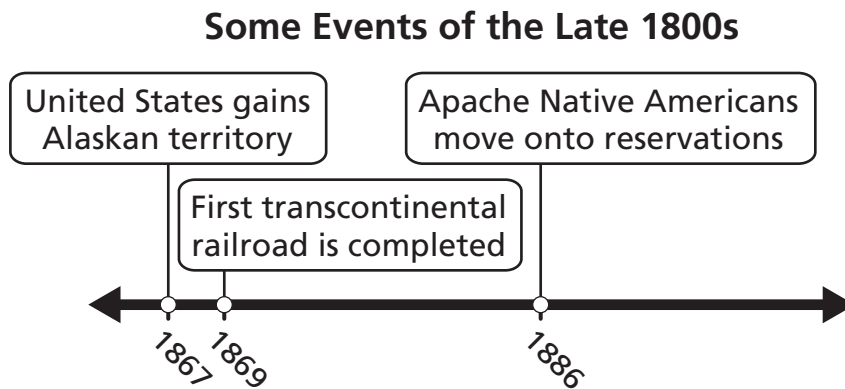
- A** laws of the country.
- B** states' boundaries.
- C** national holidays.

38 Ulysses S. Grant and Robert E. Lee are best known for

- F** capturing the man who assassinated President Abraham Lincoln.
- G** writing the Emancipation Proclamation.
- H** leading opposing armies during the Civil War.

Go On ►

Directions Use the timeline below to do Numbers 39 and 40.



39 The events listed on the timeline most contributed to

- A** westward expansion.
- B** the Civil Rights movement.
- C** improvements in farming methods.

40 Which of these was a result of the 1867 event shown on the timeline?

- F** Fewer people immigrated to the United States.
- G** The United States became less involved in foreign affairs.
- H** The United States gained access to natural resources.

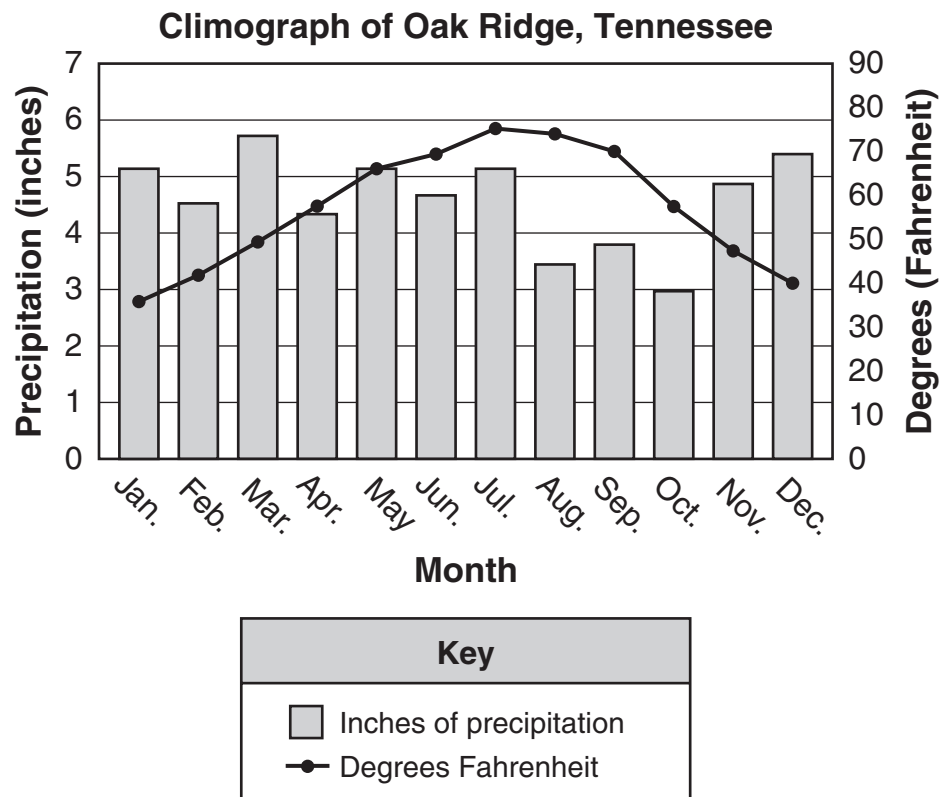
“The elections shall be free and equal . . .”

— Tennessee State Constitution

41 The excerpt above is most similar to the United States Constitution’s promise that all citizens will have the right to

- A** assembly.
- B** free speech.
- C** vote.

Go On ►



42 Based on this graph, the month with the most precipitation in Oak Ridge is

- F** March.
- G** August.
- H** October.

43 Which amendment freed the slaves?

- A** 13th Amendment
- B** 14th Amendment
- C** 15th Amendment

Mr. Miller: Well, there is not enough money for the workmen.

Senator: Why did you strike?

Mr. Miller: We did not have enough money.

— George Miller to Senate Committee, 1919

44 Based on the excerpt above, what did the striking workers want?

F cleaner factories

G better pay

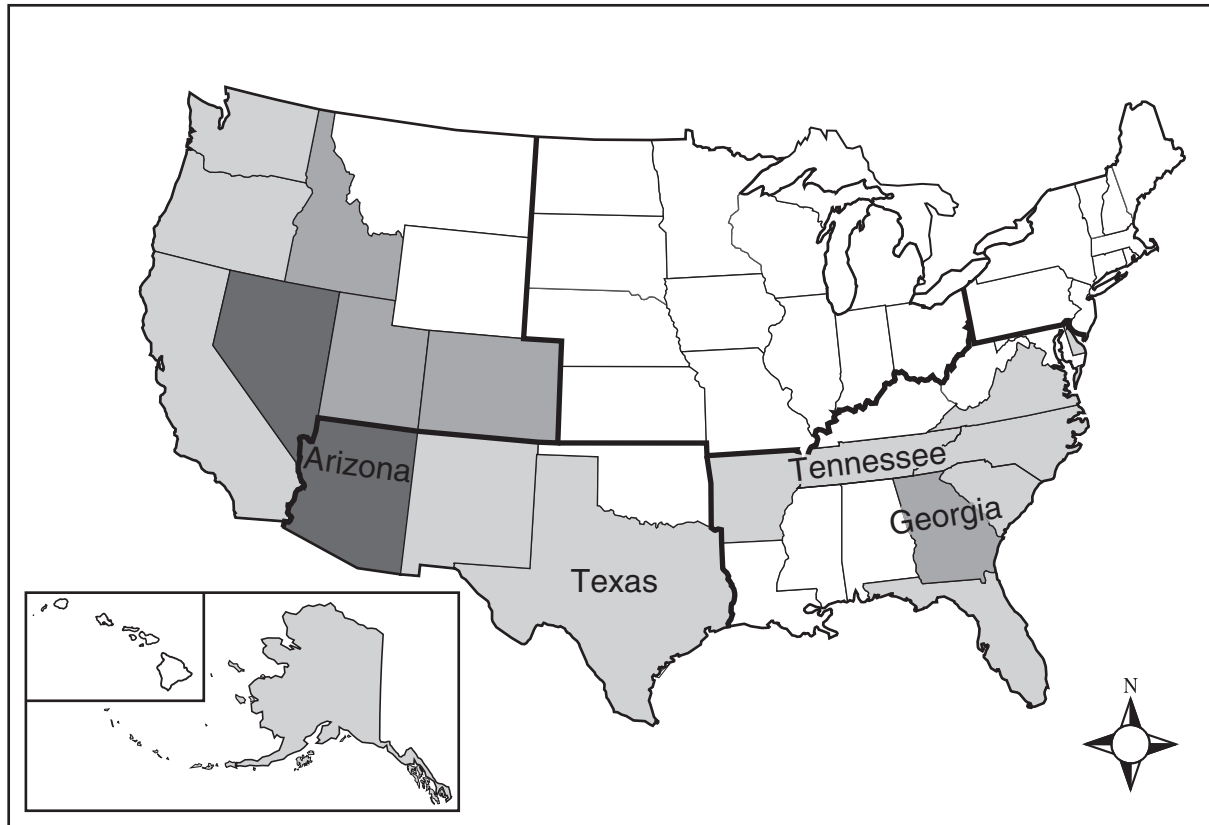
H shorter hours





Go On ►

Directions

Use the map below to do Numbers 45 and 46.

Percent Change in Population for the 50 States: 1990 – 2000



Percent Change	
 0 – 13%	 26 – 39%
 14 – 25%	 40% or more

45 What was the population change for the state of Georgia?

- A** 0 – 13%
- B** 14 – 25%
- C** 26 – 39%

- 46** Which of the following states had the largest population change from 1990 to 2000?
- F** Tennessee
 - G** Texas
 - H** Arizona
-

**Leaders of the Executive Branch
of Government**

Level of Government	Leader
Local	Mayor
State	Governor
Federal	?

- 47** Which leader best completes the chart?
- A** Senator
 - B** President
 - C** Chief Justice

Go On ►

Some Inventions of the 1800s

Telegraph

Telephone

Radio

48 The inventions listed above most helped to improve

F transportation.

G construction.

H communication.

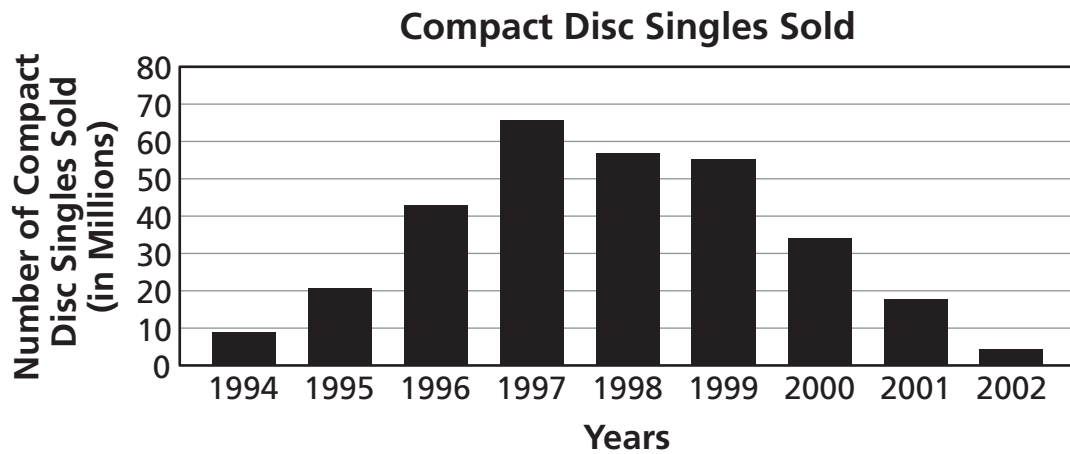
49 Which material was mostly used by Great Plains settlers to build their homes?

A concrete

B brick

C sod

Directions Use the graph below to do Numbers 50 and 51.



Source: Recording Industry Association of America

50 Approximately how many compact disc singles were sold in 1994?

- F** 9 million
- G** 15 million
- H** 21 million

51 The graph indicates that in 1997

- A** stores charged high prices for compact discs.
- B** customers bought large numbers of compact discs.
- C** record companies signed many new artists.

Go On ►

52 Which First Amendment right protects people who want to meet about water pollution?

- F** freedom of religion
- G** freedom of assembly
- H** freedom of the press



Source: US Department of the Interior

53 Which state borders Tennessee on the map above?

- A** Indiana
- B** Arkansas
- C** Florida

54 Which statement describes Jane Addams?

- F** She was the first woman governor of her state.
- G** She was a leader in the antislavery movement.
- H** She established community services for the poor.

55 An economic boom is when

- A** unemployment is high.
- B** stock prices rise.
- C** taxes increase.

56 Which of these events would be decided in a court?

- F** two farmers arguing about who owns a piece of land
- G** two police officers discussing what a law means
- H** two neighbors asking for a stop sign

Go On ►

Directions Use the photograph below to do Number 57.

Levittown

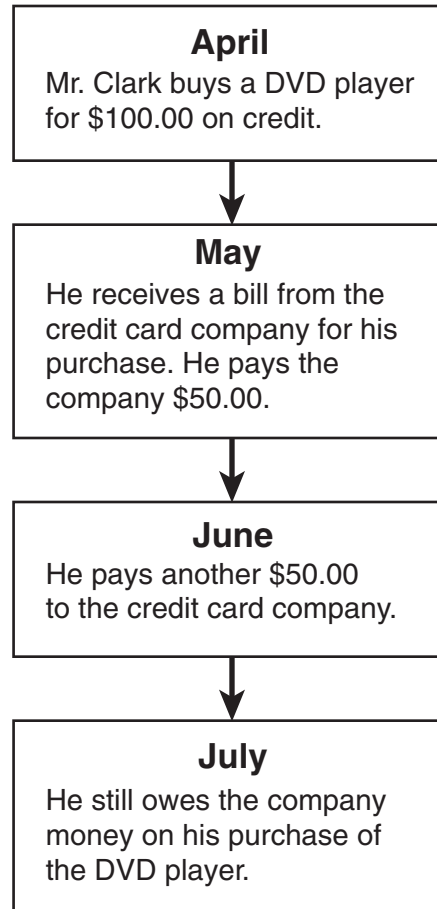


57 Which of these most contributed to the growth of suburbs such as Levittown?

- A** increases in women's rights
- B** improvements in labor laws
- C** the growing use of automobiles

Directions

Use the flow chart below to do Numbers 58 and 59.

Buying on Credit

58 The money that Mr. Clark still owes the credit card company is called

- F** deposit.
- G** savings.
- H** interest.

Go On ►

59 By using a credit card, Mr. Clark was able to

- A** buy goods and pay for them later.
- B** obtain a free service from the bank.
- C** keep a record of how much money he has.

.....

60 The purpose of Veterans Day is to honor people in the United States who

- F** came from other countries.
- G** worked for women's suffrage.
- H** served in the military.

March in Birmingham Montgomery Bus Boycott March on Washington
--

61 The people involved in the events above tried to achieve their goals mainly through

- A** nonviolent protests.
- B** electing their leaders.
- C** support of their state government.

STOP 

Reading/Language Arts Answer Key

1	B
2	H
3	C
4	G
5	A
6	H
7	C
8	G
9	C
10	H
11	B
12	G
13	A
14	H
15	A
16	F
17	B

18	G
19	C
20	G
21	A
22	H
23	A
24	F
25	C
26	F
27	B
28	H
29	C
30	F
31	B
32	G
33	B
34	F

35	C
36	F
37	C
38	G
39	C
40	G
41	B
42	G
43	A
44	H
45	B
46	F
47	B
48	H
49	A
50	H
51	B

52	H
53	C
54	F
55	C
56	F
57	B
58	F
59	B
60	H
61	B
62	H
63	C
64	F
65	B
66	G

Mathematics Answer Key

1	B
2	F
3	B
4	H
5	B
6	F
7	C
8	G
9	C
10	F
11	A
12	H
13	A

14	H
15	A
16	H
17	B
18	G
19	C
20	G
21	A
22	F
23	C
24	F
25	A
26	F

27	B
28	G
29	A
30	G
31	B
32	F
33	B
34	G
35	C
36	G
37	B
38	H
39	A

40	G
41	B
42	G
43	C
44	F
45	C
46	H
47	B
48	H
49	B
50	H
51	C

Science Answer Key

1	B
2	F
3	A
4	H
5	B
6	F
7	C
8	F
9	B
10	F
11	A
12	G
13	C
14	F
15	C
16	H

17	B
18	H
19	C
20	G
21	C
22	H
23	B
24	G
25	C
26	G
27	B
28	H
29	B
30	H
31	B
32	F

33	A
34	G
35	A
36	H
37	B
38	H
39	C
40	G
41	A
42	G
43	B
44	H
45	A
46	G
47	A
48	G

49	A
50	G
51	C
52	G
53	A
54	F
55	C
56	H
57	A
58	F
59	A
60	H
61	A

Social Studies Answer Key

1	A
2	G
3	B
4	G
5	C
6	H
7	A
8	G
9	A
10	H
11	A
12	F
13	C
14	H
15	A
16	F

17	C
18	G
19	B
20	G
21	C
22	H
23	A
24	H
25	B
26	F
27	B
28	G
29	A
30	G
31	B
32	G

33	C
34	G
35	B
36	F
37	A
38	H
39	A
40	H
41	C
42	F
43	A
44	G
45	C
46	H
47	B
48	H

49	C
50	F
51	B
52	G
53	B
54	H
55	B
56	F
57	C
58	H
59	A
60	H
61	A



Tennessee Comprehensive Assessment Program

Modified Academic Achievement Standards ~ Grade 5

Practice Test